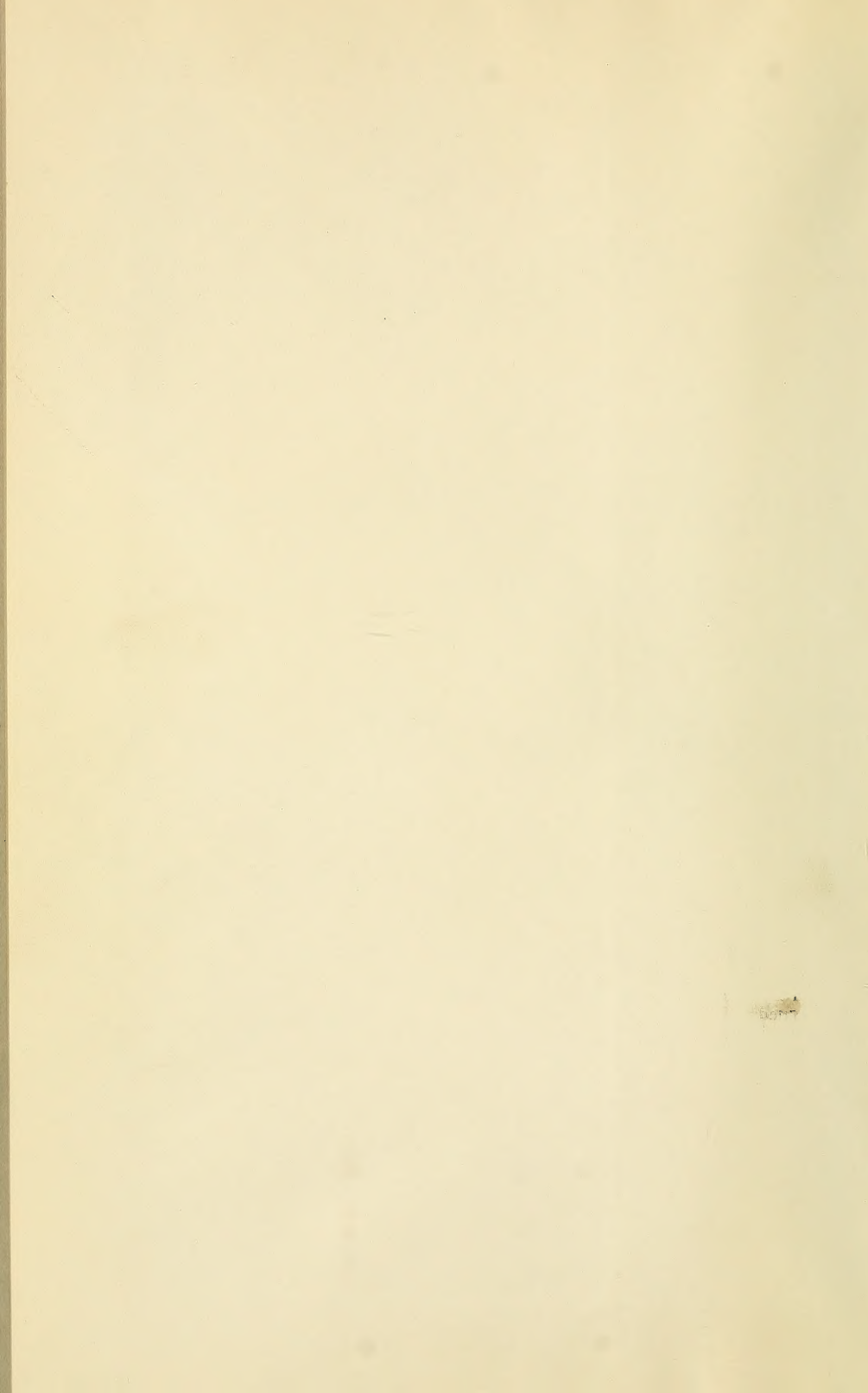


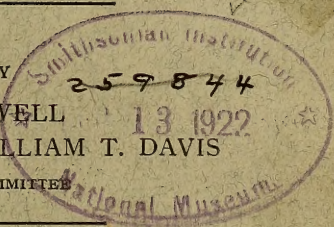
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PROCEEDINGS
OF THE
STATEN ISLAND ASSOCIATION
OF
ARTS AND SCIENCES

EDITED BY
PHILIP DOWELL
CHARLES W. LENG, WILLIAM T. DAVIS
PUBLICATION COMMITTEE



CONTENTS

Bird of Paradise Plumage	ARTHUR HOLLICK	1
Catskill Aqueduct Celebration Exhibit	ARTHUR HOLLICK	5
Does the Silver Lake Reservoir Leak Excessively?.....	WILLIAM T. DAVIS	13
Bitten by a Rattlesnake	WILLIAM T. DAVIS	15
Louis P. Gratacap	WILLIAM T. DAVIS	19
Old Court Records of Richmond County.....	EDWARD C. DELAVAN, JR.	22
Ice Phenomena at Prince's Bay during the Recent Cold Weather.		
	HOWARD H. CLEAVES	30
Quercus heterophylla in the Clove Valley.....	ARTHUR HOLLICK	32
Literature Relating to Staten Island:		
Letters and Diary, and Poems of Alan Seeger. Juniperus communis or Long Island and Staten Island. Catskill Water Supply. Catskill Aqueduct Celebration Publications. English Crown Grants. Petition and Protest in Regard to Riparian Grants, etc., on Staten Island. The Coursen (Corson) Family. Early History of Staten Island.....		35
Records of Meetings		45
Annual Reports		61
Ceremonies attending the laying of the cornerstone		77
Index		87

THE STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES

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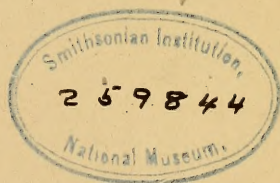
PROCEEDINGS
OF THE
STATEN ISLAND ASSOCIATION
OF ARTS AND SCIENCES

VOLUME VII

OCTOBER 1917—MAY 1918

EDITED BY THE PUBLICATION COMMITTEE

PHILIP DOWELL, CHAIRMAN
CHARLES W. LENG, WILLIAM T. DAVIS



PUBLISHED BY THE
STATEN ISLAND INSTITUTE OF ARTS AND SCIENCES
STATEN ISLAND, N. Y.

1920

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CONTENTS

	PAGE
Bird of Paradise Plumage	ARTHUR HOLLICK 1
Catskill Aqueduct Celebration Exhibit ...	ARTHUR HOLLICK 5
Does the Silver Lake Reservoir Leak Excessively? (Plate 1)	
WILLIAM T. DAVIS	13
Bitten by a Rattlesnake	WILLIAM T. DAVIS 15
Louis P. Gratacap. (Plate 2).....	WILLIAM T. DAVIS 19
Old Court Records of Richmond County	
EDWARD C. DELAVAN, JR.	22
Ice Phenomena at Prince's Bay during the Recent Cold	
Weather. (Plate 3)	HOWARD H. CLEAVES 30
<i>Quercus heterophylla</i> in the Clove Valley. (Plate 4)	
ARTHUR HOLLICK	32
Literature Relating to Staten Island.....	ARTHUR HOLLICK 35
Letters and Diary, and Poems of Alan Seeger.....	35
<i>Juniperus communis</i> on Long Island and Staten Island.	38
Catskill Water Supply	39
Catskill Aqueduct Celebration Publications	40
English Crown Grants	41
Petition and Protest in Regard to Riparian Grants, etc.	
on Staten Island	42
The Coursen (Corson) Family	43
Early History of Staten Island	44
Records of Meetings:	
Meetings of the Association:	
Regular Meeting, October 20, 1917	45
Regular Meeting, November 17, 1917	46
Regular Meeting, December 15, 1917	47
Regular Meeting, January 19, 1918	48
Regular Meeting, February 16, 1918	49
Regular Meeting, March 16, 1918	50
Annual Meeting, May 18, 1918	51

	PAGE
Meetings of the Sections:	
Section of Historical Research	52
Section of Natural Science	57
Annual Reports:	
Report of the Board of Trustees	61
Report of the Treasurer	63
Report of the Secretary	64
Report of the Director	65
Report of the Britton Cottage Committee	76
Report of the Committee of Arrangements for the Ceremonies Attending the Laying of the Cornerstone of the New Public Museum Building	77
List of Contributors to Building Fund	85
Index	87

PLATES

	FACING PAGE
Plate 1. Davis: New Springs in the Clove Valley	14
Fig. 1. Near the southwest dam.	
Fig. 2. Near Horseshoe Spring.	
Plate 2. Davis: Louis Pope Gratacap	19
Plate 3. Cleaves: Ice Phenomena	31
Plate 4. Hollick: <i>Quercus heterophylla</i> in the Clove Valley	32

PROCEEDINGS
OF THE
STATEN ISLAND ASSOCIATION
OF
ARTS AND SCIENCES

VOL. VII

OCT. 1917-MAY 1918

Bird of Paradise Plumage¹

ARTHUR HOLLICK

In the early part of last spring I was advised, confidentially, to the effect that a large consignment of bird skins and plumage intended for millinery purposes, shipped to the United States contrary to law, had been seized by the customs officials, and that it might be possible to secure some of the material for our museum.

After some preliminary inquiries the following correspondence ensued, which tells the whole story of the specimens that are exhibited this evening:

PUBLIC MUSEUM

STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES

NEW BRIGHTON, N. Y., March 31, 1917.

THE HONORABLE, THE SECRETARY OF THE TREASURY,
WASHINGTON, D. C.

Dear Sir: I am informed that prohibited plumage—aigrettes, etc.—seized by the government may, under certain approved conditions, be turned over to responsible institutions for educational purposes.

¹ Presented at the meeting of the Association October 20, 1917.

2 STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES

If such is the fact our museum would very much appreciate being considered in such connection. We could make excellent use of aigrette specimens for filling in a bird protection exhibit.

We are one of the public museums of the City of New York and our responsibility may be readily ascertained. Some printed matter relating to the Museum is enclosed.

Very respectfully yours,

ARTHUR HOLLICK,
Director.

TREASURY DEPARTMENT

OFFICE OF THE SECRETARY

DIVISION OF CUSTOMS

WASHINGTON

April 6, 1917.

DR. ARTHUR HOLLICK, *Director,*

Public Museum of the Staten Island
Association of Arts and Sciences,
New Brighton, N. Y.

Sir: The Department is in receipt of your letter of the 31st ultimo, requesting that your museum may be considered in connection with the presentation of certain prohibited plumage, which you understand is turned over to responsible institutions for educational purposes.

This Department, in January last, advised Dr. Wm. T. Hornaday, Director of the New York Zoölogical Society, New York, N. Y., that certain plumage forfeited at Laredo, Texas, as prohibited importations under paragraph 347 of the tariff act, would be delivered to his society for use as educational and scientific exhibits. Dr. Hornaday advised the Department that he would be willing to place specimens of this collection in various museums where they will serve good educational purposes and never be sold, exchanged or given away, and it is suggested therefore, that you apply to the New York Zoölogical Society for specimens for use at your museum.

Respectfully,

F. M. HALSTEAD,
Chief, Division of Customs.

In accordance with the above information and suggestion I immediately communicated with Doctor Hornaday and the following letters were received in reply:

NEW YORK ZOÖLOGICAL PARK
UNDER THE MANAGEMENT OF THE
NEW YORK ZOÖLOGICAL SOCIETY

WILLIAM T. HORNADAY, Sc.D.,

DIRECTOR.

NEW YORK, April 16, 1917.

DR. ARTHUR HOLLICK, *Director*,

The Staten Island Association of Arts and Sciences,
New Brighton, N. Y.

Dear Doctor Hollick: The bird of paradise skins that we received from the Treasury Department are commercial skins, without legs or feet, and could not by any possibility be mounted. They are fit to exhibit only as commercial skins, as collected by plume hunters for the millinery trade. I have no doubt you will be able to use some of them on that basis; and just as quick as I can get certain work off my hands that now is pressing on me very heavily, I will take up this matter and will send you four of these skins.

I regret to say that there were no aigrettes in the lot—nothing but birds of paradise.

Yours, very truly,

W. T. HORNADAY,
Director.

July 7, 1917.

By the authority of the Assistant Secretary of the Treasury we hereby send to the Museum of the Staten Island Association of Arts and Sciences, four skins of the Greater Bird of Paradise (*Paradisia apoda*) from the lot of 527 skins that were seized at Laredo, Texas, on January 29, 1916, and originally condemned for destruction.

These skins are sent to your museum "for educational purposes," and I trust they will be exhibited with a label which will explain that the birds were victims of the feather millinery trade, and owe their presence in your museum to the fact that their former owner sought to bring them into the United States for sale contrary to law.

If you will kindly sign and return the enclosed receipt² to me I will be greatly obliged.

Yours, very truly,

W. T. HORNADAY,
Director.

² Received from W. T. Hornaday, Director of the New York Zoölogical Park, 4 skins of the Greater Bird of Paradise, for exhibition in the Museum of the Staten Island Association of Arts and Sciences, New Brighton, Staten Island.

Inasmuch as these skins have been presented to the museum for educational purposes, we hereby guarantee that they will be carefully guarded from theft, and will not be disposed of for any kind of personal use.

The four skins were received at the Museum on July 11 and the receipt was immediately signed and returned as requested. They have been installed in one of the cases in our biology room, with a suitable descriptive label.

This species of bird of paradise is a native of the Malay Archipelago and is said to be confined to the Aru Islands, a small group close to New Guinea. The males only possess the remarkable plumage shown in these skins. The females are quite ordinary-looking birds.

Catskill Aqueduct Celebration Exhibit¹

ARTHUR HOLLICK

Under date of July 20, 1917, I received a communication from Dr. George F. Kunz, chairman of the subcommittee on art, scientific, and historical exhibitions of the Mayor's Catskill Aqueduct Celebration Committee, requesting the cooperation of our museum in the celebration. Our president took an immediate interest in the matter and, subsequently, Mr. William T. Davis volunteered his assistance, and assurance was received of cooperation on the part of the borough officials in charge of our water supply. With these incentives work was at once begun on a tentative scheme for the exhibit, and by the end of September nearly all of the items planned had been prepared and the instalation was begun, so that in the current issue of our BULLETIN it was possible to print a preliminary list of the exhibits, and tonight the exhibit, complete, is ready for inspection.

A catalog, in which each of the items is described in detail, is already in the printer's hands and a typewritten copy has been made for immediate reference. This catalog is to be printed in the exact form and size requested by the mayor's committee, in order that it may be uniform with other catalogs of similar exhibits elsewhere. Subsequently all will be incorporated in a single volume as a memorial of the celebration in connection with the final report of the committee.

STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES

Hon. Howard R. Bayne, *President* Charles W. Leng, *Secretary*
Arthur Hollick, Ph.D., *Director of the Museum*

CATALOG OF STATEN ISLAND EXHIBITS CATSKILL AQUEDUCT CELEBRATION EXHIBIT

prepared in coöperation with

¹ Presented in abstract at the meeting of the Association October 20, 1917.

6 STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES

THE SUBCOMMITTEE ON ART, SCIENTIFIC AND HISTORICAL EXHIBITIONS of

THE MAYOR'S CATSKILL AQUEDUCT CELEBRATION COMMITTEE

GENERAL COMMITTEE

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EXECUTIVE COMMITTEE

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William McCarroll	Henry S. Thompson
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MUSEUM EXHIBITS COMMITTEE

George Frederick Kunz, *Chairman*

Public Museum

Saint George, Staten Island

Borough of Richmond, New York City

October 11, 1917

CATALOG OF EXHIBITS

1. Wooden water main, made by boring out the center of a log.

This specimen was part of the piping of the public water supply system in use in lower Manhattan during the period from 1800 to 1835, prior to the introduction of the Croton water.

The water was obtained from a well located at Reade and Center streets and was pumped to a reservoir on Chambers street, from whence it was distributed through the wooden mains.

A piece of the wood, submitted for examination to Prof. Edward C. Jeffrey of Harvard University, was identified as white pine, *Pinus Strobus* L. (See PROC. NAT. SCI. ASSOC. STATEN IS. vol. 9, p. 47, Ap. 15, 1905, and p. 50, May 20, 1905.)

2. Specimens described in a paper by Dr. Arthur Hollick on Some Botanical and Geological Features of the Silver Lake Basin, read at the meeting of the Staten Island Association of Arts and Sciences, October 17, 1914. (See PROC. STATEN IS. ASSOC. ARTS AND SCI., vol. 5, p. 60-65, pl. 2-5. Oct. 1914.)

(a) *Polypodium vulgare* L. Common polypody fern. Rare on Staten Island.

(b) *Lorinseria areolata* (L.) Underw. Net-veined chain fern. Recorded from but a few localities on Staten Island.

- (c) *Brasenia purpurea* (Michx.) Casp. Water shield or water target. Silver Lake was the only known station for this species on Staten Island. It is now probably exterminated from our local flora.
 - (d) *Dentaria laciniata* Muhl. Cut-leaved toothwort or pepper grass. Recorded from but few localities on Staten Island.
 - (e) *Prunus pennsylvanica* L. f. Wild red or pigeon cherry. A single tree, now destroyed, was the only one known on Staten Island.
 - (f) *Diospyros virginiana* L. Persimmon. A few of these trees formerly grew on the northwestern border of Silver Lake. They are more or less common in the vicinity of Tottenville and Kreischerville, and a few may be found in the vicinity of Bull's Head and Watchogue.
 - (g) Peat from the northeastern end of Silver Lake basin.
 - (h) Semilignitic wood from peat bed.
 - (i) Hickory nuts from peat bed.
 - (j) Wood from the silt at the inner margin of the peat bed.
 - (k) Silt from near the center of the lake basin, exposed by draining off the water, covered with a growth of *Eleocharis acicularis* (L.) R. & S.
 - (l) Sandy silt, representing the lowest deposit in the basin.
 - (m) Glacial till from beneath the peat bed and silt deposits, representing the original lake bottom.
3. Pictures illustrating the paper mentioned under Exhibit 2, reproduced from photographs taken by H. H. Cleaves September 29, 1914.
- (a) View, looking northeast across the partly drained lake basin.
 - (b) Beginning of a crevasse in the marginal silt.
 - (c) A slip, following a crevasse in the marginal silt, exposing the original lake bottom.
 - (d) Shrinkage cracks in the surface of the silt toward the middle of the drained lake basin.
 - (e) View, looking across the northeast end of the receding water, showing advancing terrestrial vegetation.
 - (f) Part of the drained lake basin, northeast end, showing zone of *Decodon verticillatus* (L.) Ell. in the background, *Bidens laevis* (L.) B. S. P. in the foreground.
 - (g) *Decodon* zone on former shore margin of the peat bed at northeast end of the lake basin.
 - (h) Ditch cut through the peat bed, about seven feet in depth.
4. (a) Silver Lake as it was in 1859. Photograph by H. Hoyer, enlarged. View is from the eastern side, looking toward the northwest.
- (b) View from approximately the same point as that from which the above mentioned picture was taken, showing the marginal grading and the partly drained basin of the lake in preparation for its conversion into a reservoir. Photograph by H. H. Cleaves, September 29, 1914.

5. (a) Silver Lake as it was in 1896. Photograph by Otto Loeffler, enlarged. View is from the northeast end, looking toward the south.
- (b) View from approximately the same point as that from which the above mentioned picture was taken, showing the trees cut down, the water mostly drained off, and the sides of the basin raised and graded in order to convert it into a reservoir. Photograph by H. H. Cleaves September 29, 1914.
6. Silver Lake Reservoir, completed and filled with water. Photographs by J. A. Rundlett October 8, 1917.

This reservoir is now the southern terminus of the Catskill water supply system. Capacity = 438,000,000 gallons. Area of water surface = 54 acres.

- (a) View from the northeast end, looking toward the northwest.
- (b) View from the northeast end, looking toward the west.

The reservoir is constructed in two sections. The northeastern section, shown in the foreground, was made by erecting a dam across Logan's spring valley. The southwestern section, shown in the background, is the old Silver Lake basin in which the original water level was 200 feet above tide. By the erection of a dam across the natural outlet at the southwestern end the level of the water has been raised to 228 feet above tide.

7. Logan's spring. Photograph by William T. Davis, November 30, 1911, enlarged.

The site of this formerly well known spring is now at the bottom of the northeastern section of the reservoir.

8. The Hessian Springs. Photograph by Edward C. Delavan, Jr., 1902. These springs were located in the valley of the Jersey Street brook, between Jersey Street, Westervelt Avenue, Fifth Street, and Crescent Avenue, New Brighton. They were formerly an important source of water supply for the neighborhood.

9. Views illustrating the growth of population in the section of Staten Island nearest to New York, from the time when local natural springs and shallow wells were adequate sources of individual and neighborhood water supply to the present time, when it is necessary to bring water through an elaborate aqueduct system from a distance of more than one hundred miles.

- (a) Steel engraving, entitled "New York from Staten Island," from "The Picturesque Beauties of the Hudson River and Its Vicinity, etc.," published by J. Disturnell, 156 Broadway, New York, in or about 1835-36. The view is from the top of Pavilion Hill, with New York in the distance and the shore front of Staten Island in the foreground. Only four houses are shown, exclusive of the old Quarantine buildings at Tompkinsville.
- (b) Two views taken from the same place and showing the same section occupied by hundreds of dwellings, apartment houses, stores, warehouses, public buildings, etc. Photographs by William T. Davis, September 29, 1917, enlarged.

10. Pictures of the pumping stations and reservoirs of the several water supply systems constructed prior to the introduction of the Catskill water. The supply was obtained entirely from driven wells.

This exhibit is contributed by the Department of Water Supply, Gas and Electricity, Borough of Richmond, through John W. McKay, Borough Engineer in charge of water supply.

- (a) Enlarged photographs, framed, of the (1) Tottenville, (2) Bull's Head, (3) New Springville, and (4) Clove pumping stations. (5) Architect's colored drawing, framed, of the Grant City station. (6) Photograph of the West New Brighton station, by J. A. Rundlett, October 1917.
 - (b) Exterior and interior views of the Grant City station, erected in 1911. This is the main pumping station of the Southside Boulevard water development system, which is being held in reserve in event of an emergency. Pumping capacity = 6,500,000 gallons per day of 24 hours. Photographs by J. A. Rundlett, October 1917.
 - (c) Exterior and interior views of one of the four auxiliary stations on Southside Boulevard. Total pumping capacity of the four stations = 9,000,000 gallons per day of 24 hours. Photographs by J. A. Rundlett, October 1917.
 - (d) High service standpipe, Grymes Hill. Elevation of top = 452.8 feet above sea level. Capacity = 234,000 gallons. Size = 100 feet high by 20 feet diameter. Photograph by J. A. Rundlett, October 1917.
 - (e) Clove reservoir, Richmond Turnpike and Little Clove Road. Elevation of flow line = 250 feet above sea level. Capacity = about 2,080,000 gallons. Photograph by J. A. Rundlett, October 1917.
 - (f) Fort Hill or New Brighton reservoir, between Bismarck, Downey [Winter], and Lynch [Scribner] avenues, New Brighton. Elevation of flow line = 211.9 feet above sea level. Capacity 800,000 gallons. Put in service August 1881, abandoned 1917. Photographed by J. A. Rundlett, October 1917.
11. (a) Members of Staten Island Battery, Veteran Corps of Artillery, at headquarters, Ardsley Sector, Catskill Aqueduct, September 1917. Photograph.
- The Staten Island battery was Battery A, First Provisional Regiment, New York State Militia.
- (b) Hon. Howard R. Bayne, Staten Island Battery, Veteran Corps of Artillery, returning from inspection of culvert under Catskill Aqueduct, while on guard duty at fixed post No. 8, Ardsley Sector, September 14, 1917. Photograph.
12. A newspaper account of the Catskill water supply project fourteen years ago. New York Sun, October 11, 1903.

10 STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES

13. List of works and articles relating or containing references to sources of water supply for Staten Island. Twenty-nine titles are listed, arranged in chronological sequence, all of which are in the library of the Association, where they may be consulted on application at the office of the director.

APPENDIX

LIST OF PUBLICATIONS MENTIONED IN ITEM NO. 13 OF THE CATALOG

1871. OLMSTED, FREDERICK L., and others. Report of a Preliminary Scheme of Improvements. Staten Island Improvement Commission. 8vo pamph. 113 p. Jan. 12, 1871.
1884. GRATACAP, LOUIS P., and CONGDON, ERNEST. Notes on the depth and temperature of Silver Lake. PROC. NAT. SCI. ASSOC. STATEN. IS. 1: 11. Sep. 13, 1884.
1888. HOLLICK, ARTHUR. A Few Words about Our Water Supply. *Staten Is. Magazine* 1: 10-14. Aug. 1888. Also reprinted.
1891. GRATACAP, LOUIS P. Notes on an examination of the water of the Staten Island Water Supply Company. PROC. NAT. SCI. ASSOC. STATEN IS. 2: 72, 73. Feb. 14, 1891.
1895. HOLLICK, ARTHUR. Our Water Supply. *Ibid.* 4: 60-62. Feb. 9, 1895.
1895. CARRÈRE, JOHN M., and others. Reports of the Health Committee of the Good Government Club on the Water Supply of New Brighton and Port Richmond. 8vo pamph. 23 p. May 28, 1895.
1896. DAVIS, WILLIAM T. Springs, Ponds, and Swamps. In Staten Island Names, Ye Olde Names and Nicknames. Special No. 21, PROC. NAT. SCI. ASSOC. STATEN IS. 5: 46-52. Mar. 14, 1896.
1898. HOLLICK, ARTHUR. Notes on Our Water Supply. *Ibid.* 6: 62, 63. Oct. 8, 1898.
1899. HOLLICK, ARTHUR. Notes on Deep Wells at Prince's Bay and Huguenot. *Ibid.* 7: 19. June 10, 1899.
1900. FREEMAN, JOHN R. Report upon New York's Water Supply, etc., made to Bird S. Coler, Comptroller. 8vo, cloth, 587 p. 113 pl. maps and diagrams. Mar. 23, 1900. Reviewed in PROC. NAT. SCI. ASSOC. STATEN IS. 7: 45, 46. Oct. 13, 1900.
1900. THE MERCHANTS' ASSOCIATION OF NEW YORK. The Water Supply of the City of New York. 8vo, cloth, 627 p. 25 pl. and one map. Aug. 1900.
1902. HOLLICK, ARTHUR. Some Comparisons between Recent and Previous Analyses of Our Public Water Supplies. PROC. NAT. SCI. ASSOC. STATEN IS. 8: 45, 46. Dec. 13, 1902.
1903. HOLLICK, ARTHUR. Depth and Form of the Silver Lake Basin. *Ibid.* 68, 69. Oct. 10, 1903.
1903. DAVIS, WILLIAM T. Springs, Ponds, and Swamps. In Supplement to Staten Island Names, Ye Olde Names and Nicknames. Special No. 23. *Ibid.* 8: 78-80. Oct. 1903.

1904. HOLLICK, ARTHUR. Some Recently Discovered Facts in Regard to Silver Lake. *Ibid.* 9: 11-13. Feb. 13, 1904.
1904. HOLLICK, ARTHUR, and others. Report of the Water Supply Committee, Staten Island Chamber of Commerce. 1904. Manuscript copy.
1904. BURR, WILLIAM H., and others. Report of the Commission on Additional Water Supply for the City of New York, etc. 8vo, cloth, 980 p. plates, figures, diagrams and maps 150+. 1904.
1905. JACKSON, DANIEL D. The Normal Distribution of Chlorine in the Natural Waters of New York and New England. U. S. Geol. Surv. Water-supply and Irrigation Paper No. 144. 8vo pamph. 31 p. 5 pl. 1905. Reviewed in *PROC. STATEN IS. ASSOC. ARTS AND SCI.* 1: 17-19. Dec. 1905.
1906. VEATCH, A. C., and others. Underground Water Resources of Long Island, New York. U. S. Geol. Surv. Prof. Paper No. 44. 4to, paper, 394 p. 34 pl. 71 f. 1906. Reviewed in *PROC. STATEN IS. ASSOC. ARTS AND SCI.* 1: 68, 69. May 1906.
1909. TRIBUS, LOUIS L. Acquisition by New York City of the Larger Two Water Systems of Staten Island. *Proc. Amer. Water Works Assoc.* 1909: 557-579, 10 f. and map. Also reprinted. Reviewed in *PROC. STATEN IS. ASSOC. ARTS AND SCI.* 3: 174, 175. 1911.
1910. HOLLICK, ARTHUR. Report on Geological Features and Conditions in the Borough of Richmond (Staten Island) Affecting the Problem of Water Supply, etc. Manuscript copy. Also see Rept. by I. M. de Varona, Chief Engineer, Dept. Water Supply, Gas and Electricity, to Henry S. Thompson, Commissioner, Feb. 28, 1910.
1911. HOLLICK, ARTHUR. Report on the Present Status of the Water Supply Problem on Staten Island, N. Y., made to Hon. Walter I. McCoy, Committee on the Judiciary, House of Representatives, June 29, 1911. Manuscript copy.
1911. BERKEY, CHARLES P. Geology of the New York City (Catskill) Aqueduct. N. Y. State Museum Bull. No. 146 (Education Dept. Bull. No. 489). 8vo, cloth, 283 p. 38 pl. 40 f. Feb. 15, 1911.
1913. BOARD OF WATER SUPPLY OF THE CITY OF NEW YORK. Catskill Water Supply. 8vo pamph. 32 p. 21 f. maps and diagrams. Jan. 1913.
1914. ANONYMOUS. Combined Excursion by the Municipal Engineers of the City of New York and the Brooklyn Engineers' Club to Narrows Siphon, Richmond Conduit, and Silver Lake Reservoir. 8vo pamph. 15 p. 11 f. Oct. 10, 1914. Reviewed in *PROC. STATEN IS. ASSOC. ARTS AND SCI.* 5: 101, 102. 1915.
1914. HOLLICK, ARTHUR. Some Botanical and Geological Features of the Silver Lake Basin. *PROC. STATEN IS. ASSOC. ARTS AND SCI.* 5: 60-65, pl. 1-4. Oct. 1914-May 1915. Also reprinted.
1915. HOLLICK, ARTHUR. Additional Notes on the Botany of the Silver

12 STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES

Lake Basin. Ibid. 6: 67-68, *pl. 1*. Oct. 1915-Jan. 1916. Also reprinted.

1915. NEW ENGLAND WATER-WORKS ASSOCIATION. SUB-COMMITTEE ON PUBLICATIONS, 34TH ANNUAL CONVENTION. The Water-Works and Other Engineering Features of New York. 8vo pamph. 52 p. 88 pl. f. and maps. Sep. 1915.
1917. WILLIAMS, WILLIAM. A Brief Sketch of the Municipal Water Supply System of the City of New York, Specially Prepared for the Mayor's Catskill Aqueduct Celebration Committee by the Department of Water Supply, Gas, and Electricity. 8vo pamph. 27 p. 9 f. 1917.

Does the Silver Lake Reservoir Leak Excessively?¹

WILLIAM T. DAVIS

(WITH PLATE I)

The *Staten Islander* of September 15, 1917, published a letter from the writer on the apparent leakage of the Silver Lake reservoir. The points there mentioned are in the main as follows: That shortly after the Catskill water was let into the reservoir, the region about the Horseshoe Spring in the Clove Valley was observed to be very wet, and little rivulets of water commenced trickling down the sloping ground about the spring. That the water came from the hillside above, and the actual flow of the spring itself was not noticeably increased. That the once dry paths below the reservoir are now almost impassable to the average pedestrian; and that with time the ground has become more and more saturated with water, and the little stream that drains the valley to the southwest is quite a brawling brook.

The foregoing refers to leaks in the dam constructed to retain that part of the reservoir formed from the old Silver Lake basin, but the additional dam, built to retain the northern section of the reservoir, occupying the site of Logan Spring, also leaks considerably, as shown by the increased flow of the brook that passes through the grounds of the Sailors' Snug Harbor and crosses Castleton Ave. near Bard Ave. At the headwaters of this stream it may be seen that numerous rivulets from the slope adjacent to the reservoir join to make a brook even in the days of dry summer weather.

While it was to be expected that the two dams would leak to some extent, it was pointed out that this, in time, might become excessive, as running water is apt to enlarge its outlets.

¹ Presented at the meeting of the Association October 20, 1917.

Lately the ground has been again carefully gone over and photographs taken of one of the paths that has been turned into a little brook; of a new little brook on the slope from the south-westerly dam, and of two recently formed springs in the Clove Valley, both of which are now made use of by passers by, one in particular being a favorite with picknickers, who desire to drink Catskill water while sitting in the sylvan shade of a Staten Island wood.



FIG. 1. New Spring in the Clove Valley near the Southwest Dam



FIG. 2. New Spring in the Clove Valley near Horseshoe Spring

Bitten by a Rattlesnake¹

WILLIAM T. DAVIS

In the southeast corner of North Carolina, at the mouth of the Cape Fear River, is the little town of Southport. The country round about is low and flat and some of it is swampy. It is an ideal spot for a naturalist in the pleasant days of spring, and thither Mr. Harry G. Barber and I have twice journeyed in April to meet more quickly the advancing season and to see what insects could be found there. All entomologists inquisitively turn over logs and stones, bits of old boards, and anything else that may shelter insects. Thus it happened that when Mr. Barber and I, on April 20, 1916, were near a little farm about a mile from Southport, he commenced to examine a loose pile of old bricks that had apparently lain for a considerable time where we found them. This was about 10 a. m., and my companion soon called to me that he had found among the bricks a small snake, which I immediately went to examine. The snake was partly hidden, but from what I could see of it it looked like a little hognosed snake. On account of its small size, I was not as careful as usual and took too great liberties with the little creature, which promptly resented my interference by biting me on the third finger of my left hand, near the base of the nail. It was all done so quickly that Mr. Barber failed to see the snake strike, though he was looking at it at the time. Two tiny drops of blood oozed from the wounds and my finger immediately began to pain me considerably, and in a short time showed some swelling about the wound, and then about the knuckle. Gradually my hand began to swell and the pain in the finger was not quite as great as it had been. The snake after biting me, completely disappeared among the bricks, so it was necessary

¹ Presented at the meeting of the Association October 20, 1917.

to remove the greater part of the pile before I could find it, but after a time it was captured and transferred to a cyanid bottle where its biting abilities soon ceased. It was a small ground rattlesnake, *Sistrurus miliarius* Linn., just nine inches in length. I came to the conclusion that so small a rattler could not damage me greatly, and that I would just keep actively after the insects and see what would happen.

In the afternoon we went westward from the town, and not finding very good collecting came home early. My hand and arm had kept on swelling and our landlady thought I had better consult Dr. G. A. Doshier, who had had considerable experience with snake-bitten people. About 6 p. m. I called on the doctor, showed him the snake, and told him my simple story, which seemed to interest him very much. He tried my pulse and said I showed no signs of heart disturbance and, as I felt well, he thought I did not need any treatment, which accorded with my own opinion. He painted my finger with iodin, and told me I had better get some aromatic spirits of ammonia, which could be taken if I felt ill from the effects of the poison. He was much interested in my adventure and in my account of the insects I had found, and would not charge me anything for his kind services.

That night I could not get my undershirt off on account of my swollen arm, and removed my other clothes with some difficulty. My whole arm was heavy and very much swollen, and my hand pained me, so that I did not sleep as soundly as usual. I was well otherwise until I got up in the morning, when I felt faint and dizzy, and had to get back into bed as quickly as possible. Mr. Barber gave me some of the ammonia in water, and shortly I was better again. Later we walked out to our collecting ground, and I managed to beat a few insects into my umbrella. When I returned to the house at noon I found that our kind landlady, Miss Stuart, had made me a finger stall, and while she was trying it on I had another moment or two of illness, and had recourse to the ammonia and water again. Thus

the doctor and I were mistaken about the time it ought to take before I would feel ill. The poison seemed to act on me very slowly and it was twenty-one hours before I felt any other ill effects than the pain in my hand. Of course, with a larger snake it would have been different, and a big diamond-back striking me on my unprotected hand, as did the ground rattler, would probably have caused my death, unless some prompt measure of relief had immediately been taken. The reason Miss Stuart made me the finger stall was that my finger had turned partly black and I had made several small punctures in the area, from which watery, decomposed blood was slowly dripping.

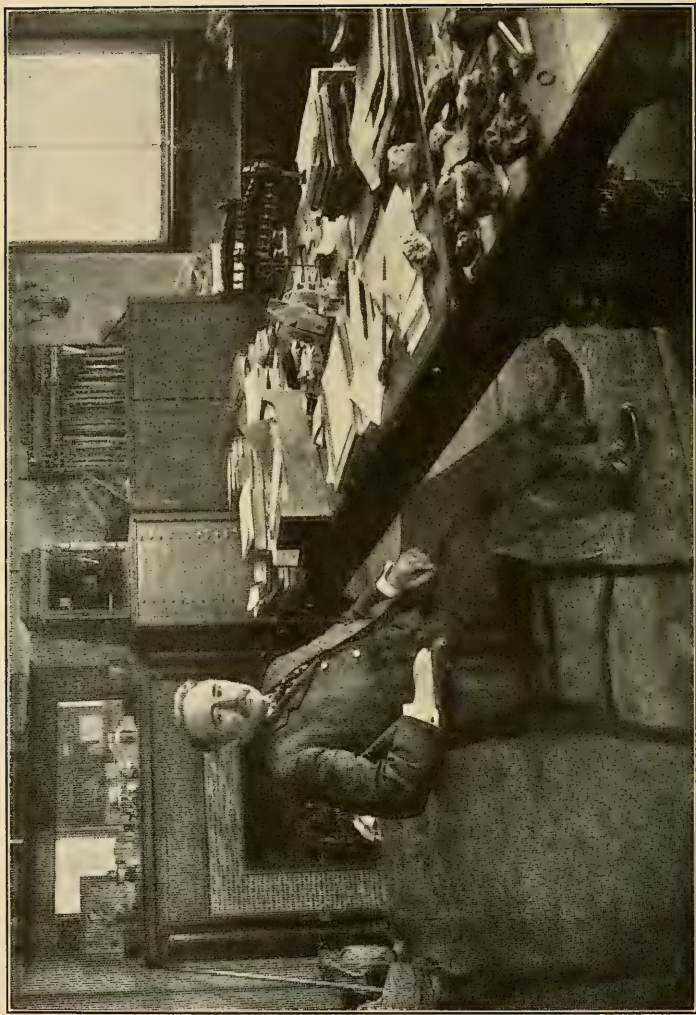
I managed to pack up my belongings and to carry my two rather heavy bags to the station on the morning of April 22, on our way to Wilmington. Here we went collecting again for the day, and in the late afternoon Mr. Barber started for home and I for Hamlet, N. C. While my hand was slightly improved, I noticed upon taking off my undershirt at night in the hotel at Hamlet, that my side was some enlarged, and that a flabby sac-like swelling had formed below my arm. Blood had also settled darkly on the under side of my arm, giving it a black and blue appearance.

On the morning of April 23 I went on to Southern Pines, N. C. The swelling on my side went down during the night and my hand was also better. The watery blood had almost ceased oozing from my finger. The swollen glands under my arm, sore and painful from shortly after the time I was bitten, were also much better. That night when I removed my shirt, I noticed that I again had a flabby saclike swelling on my left side about eight or nine inches below my arm, but it was not as large as the one of the previous night.

On the morning of the 24th the saclike swelling of the previous evening had disappeared, but my arm was still some swollen and my third finger painful and not a pleasant looking object. From Southern Pines I went to Raleigh, N. C., where I met Mr. C. S. Brimley, author of a List of Reptiles and Amphibians of North

Carolina, with whom I have been acquainted for a number of years. He was much interested in my ground rattlesnake, and stated that he had never before seen a specimen from North Carolina. The records in his list are "Wilmington (Cope), Bogue and Shackleford's Banks (Coues 1871)."

While the swelling of my arm had disappeared by April 30 my finger was still much swollen and I could not bend it very well, it was painful to pressure about the second joint. From this time on it gradually improved and now at the time of writing, eighteen months after I was bitten, has regained nearly its normal size and condition, although on cold days it is numb, showing that the circulation is not as perfect as it is in the other fingers of the same hand.



LOUIS POPE GRATACAP

In his room in the American Museum of Natural History
(From a halftone in the program of the Abbé René Just Haüy celebration)

Louis P. Gratacap¹

WILLIAM T. DAVIS

(WITH PLATE 2)

Louis Pope Gratacap died suddenly at his home, 163 Bement Avenue, West New Brighton, Staten Island, on the morning of December 19, 1917, and was buried in the family vault near the south side of old Trinity church on Broadway, New York City, on December 22, 1917. He was connected with the American Museum of Natural History since 1876, and was curator of mineralogy since 1881. Considering his position, his attainments, and genial personality, it is no wonder that several biographical sketches are being prepared, which will no doubt include a bibliography of his writings.

Every one intimately acquainted with Mr. Gratacap has a good word to say for him, for the man of high purposes, for the student and kindly friend. He was born in Brooklyn, N. Y., November 1, 1851, son of John L. and Lucinda (Benton) Gratacap. He was graduated from the College of the City of New York in 1869 and from the Columbia College School of Mines in 1876. The family moved to Staten Island many years ago, and it was from his home on Bement Ave. that he attended college, a tedious journey in the days of slow ferryboats and the horsecar lines.

The versatility of the man, as his bibliography, when published, will show, was quite remarkable. He, with one assistant, Mr. Joseph Quinn, not only kept the great collections of minerals and shells of the American Museum of Natural History in perfect order, but somehow managed to give them an artistic setting that was most admirable and pleasing. He also found time to write on many subjects quite varied in character. Among several hun-

¹ Presented at the meeting of the Association January 19, 1918.

dred titles will be found three papers on museums, a guide to mineral collections, three editions of the Geology of the City of New York, A Trip around Iceland, Analytics of a Belief in a Future State, Protection a Reasonable Doctrine, The Substance of Literature, and about a half dozen novels.

From 1878 to 1881 he was also chemist to the Metropolitan Gas Co., and on one occasion delivered a lecture before the Natural Science Association of Staten Island on the Properties of the various kinds of illuminating gas. As a lecturer he had few equals, and his many ideas were not only presented entertainingly, but also through the medium of a remarkable vocabulary. It is related that ex-Governor Benjamin B. Odell, a guest at an alumni dinner, after listening to Mr. Gratacap, turned to the presiding officer of the occasion and remarked: "That man a cold scientist? Why if he went into public life, he would class with orators like Joseph Choate and Horace Porter." But Mr. Gratacap did not care to go into public life; he was a student and thought more of the quiet of his home, where he and his brother Thomas lived alone, except for the servant, after the death of their parents. He also lived for his friends, and many can testify to his kindly acts both in financial aid and otherwise. We know of at least one hall man in the American Museum that through him was able to enter a profession, and there are many others that he helped with advice and sympathy, which is often quite as useful as more material aid.

While we cannot here enter into all of the details of a lengthy biography, we can at least recall more minutely his connection with the Natural Science Association of Staten Island, of which he became a member in 1881. In 1887 and 1888 he was president of the Association, and we recall his efforts to make the meetings, which were then held in the New Brighton Village Hall, attractive and interesting. From 1884 to 1901 he contributed twenty-four papers and miscellaneous notes to our PROCEEDINGS and, as these show his interest in the natural history of our island, the list is appended.

LIST OF PAPERS AND MISCELLANEOUS NOTES BY L. P. GRATACAP IN THE PROCEEDINGS OF THE NATURAL SCIENCE ASSOCIATION OF STATEN ISLAND

- Remarks on Silver Lake. Vol. 1, p. 11. Sep. 13, 1884.
Chlorides in the rainfall of Staten Island for 1884. Vol. 1, p. 19. Mar. 14, 1885.
Notes on the composition of our beach sands. Vol. 1, p. 27. Dec. 12, 1885.
Remarks on the drift fossils of Staten Island. Vol. 1, p. 46. Jan. 8, 1887.
Preliminary list of Palaeozoic fossils found in the drift of Staten Island. Vol. 1, p. 51-52. Mar. 1887.
Notes on the origin of the serpentine rock of Staten Island. Vol. 1, p. 55. May 14, 1887.
Remarks on the temperature of certain Staten Island springs. Vol. 1, p. 62. Feb. 11, 1888.
Relation between the growth and form of leaves. Vol. 2, p. 3. Dec. 8, 1888.
Account of fossils from a drift boulder of Oriskany sandstone. Vol. 2, p. 7. Mar. 14, 1889.
Remarks on specimens of quartz geodes and limonite concretions from the iron mines near Four Corners. Vol. 2, p. 44-45. Mar. 13, 1890.
Notes on an examination of the water of the Staten Island Water Supply Co. Vol. 2, p. 72, 73. Feb. 14, 1891.
Memorandum on *Lymnea palustris*. Vol. 2, p. 79-80. May 9, 1891.
Notes on certain mineral constituents of the Staten Island and New Jersey trap rock. Vol. 2, p. 81. June 13, 1891.
Note on trap dike of Staten Island and its influence on the water supply. Vol. 3, p. 5-6. Dec. 12, 1891.
Fossils recently found in drift boulders on Staten Island. Vol. 3, p. 9-10. Feb. 13, 1892.
Notes on berries of *Smilax rotundifolia*. Vol. 3, p. 27. Dec. 17, 1892.
Note on the effect of the growth of seaweed on rocks along the shore of Staten Island. Vol. 3, p. 27-28. Dec. 17, 1892.
Additional determinations of Schoharie fossils from the drift. Vol. 4, p. 7. Dec. 9, 1893.
Additions to the drift fossils of Staten Island. Vol. 4, p. 16-17. Mar. 10, 1894.
The significance of the accumulation and distribution of boulders on the north shore of the island. Vol. 7, p. 13-14. Apr. 8, 1899.
Note on *Erythronium americanum* Ker. Vol. 7, p. 18. May 13, 1899.
Notes on the Limonite Beds on Ocean Terrace. Vol. 7, p. 28, 29. Dec. 9, 1899.
Are the Kreischerville clays all Cretaceous in age? Vol. 7, p. 38-39. May 12, 1900.
The Clove Valley Pleistocene lake basin. Vol. 8, p. 3-4. Jan. 12, 1901.

Old Court Records of Richmond County¹

EDWARD C. DELAVAN, JR.

The book of ancient court records referred to by Clute on page 167 of his *Annals of Staten Island* and by the Historical Tablet Committee at page 12, volume 6, of the *PROCEEDINGS OF THE STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES*, has been found in the office of the Clerk of the County of Richmond. It establishes the fact that for some eight years there was a building called a courthouse or county house at Stony Brook.

The first mention of a term of court held at Stony Brook occurs under the date of March 5, 1718. The first mention of a courthouse is found under the date of March 7, 1721. A term of the Court of Sessions was "held at Stony Brook at the Court House" on March 5, 1723; it was at this term that Sheriff Benjamin Bill's protest against the insufficiency of the jail was presented (Clute, 167).

The term of the Court of Common Pleas, opened on March 6, 1729, appears to have been the first "held at Richmond town in the County abovesaid at the Court House."

The back of the cover of this record book bears the following label:—

RECORDS
of the
COURT OF SESSIONS
COMMON PLEAS
1710-1743.

The Court of Sessions had criminal, and the Court of Common Pleas civil jurisdiction. The last entry in the book is that of a term of Court of Common Pleas held on March 19, 1745.

The flyleaf shows the following title:

¹ Presented at the meeting of the Section of Historical Research January 12, 1918.

The Book
of
Records of the Courts of Sefsions
and Comon Pleas Held In
The County of Richmond In
The province of New York &c

Cominc^d y^e 6th day
of March An^o 17¹¹/₁₁
and
Kept p^r
Alex^r Stuart Clk.

Quid faciunt Leges ubi Sola pecunia regnat
Aut ubi paupertas—Vinces Nulla potest
Ad^m Mott Clk.

The first page contains the following entry:

Richmond is.

Att a Court of Sefsions held for y^e County aforesaid
one Tuesday being the 6th day of March In the 9th year
of Her Majefties Reigne, Anne Queen of Great Britain &c
Annoq. Dom. 17¹¹/₁₁.

Pref^t.

Benjⁿ. Brittin }
Philip Morill }
Harris Richoe }
Constables.

John Stilwell }
Ab^m Lackerman } J(ustices).
Jacob Corfen }

W^m Tillyer Esq^e. Sheriff

The Grand Jury paneled, entred and sworne—

The prefont^{mt} of the Grand Jury We doe prefont
Vincent Roberts Houfe Car(penter?) for breach of
the Sabath and afsaulting a woman &c

Grand Jury Discharg^d

Ordered y^t y^r prefont^{mt} agft Vincent Roberts be Ingrofs^d
and fild.

Court a Journed till
the firft Tuesday of
7ber next.

The following table contains a synopsis of the succeeding entries to the year 1731:

1711	March	7	Common Pleas Held for the County aforesaid...	9 th Anne.
1711	Sept.	4	Sessions Held for the County aforesaid.....	10 th Anne.
1711	Sept.	5	Common Pleas Held for the County aforesaid...	10 th Anne.
1712	March	4	Sessions Held for the County aforesaid.....	10 th Anne.
1712	March	5	Common Pleas Held for the County aforesaid..	
1712	Sept.	2	Sessions Held for the County aforesaid.....	11 th Anne.
1712	Sept.	3	Common Pleas Held for the County aforesaid...	11 th Anne.
1713	March	3	Sessions Held for the County aforesaid.....	
1713	March	5	Common Pleas Held for the County aforesaid...	
1713	Sept.	2	Sessions Held for the County aforesaid.....	
1713	Sept.	3	Common Pleas Held for the County aforesaid...	
1714	March	2	Sessions Held for the County aforesaid.....	
1714	March	4	Common Pleas Held for the County aforesaid...	
1714	Sept.	7	Sessions Held for the County aforesaid.....	13 th Anne.
1714	Sept.	8	Common Pleas Held for the County aforesaid...	13 th Anne.
1715	March	1	Sessions Held for the County aforesaid.....	1 st Ge° I
1715	March	2	Common Pleas Held for the County aforesaid...	
1716	March	-	Common Pleas Held for the County aforesaid.	2 nd Ge° I
1716	March	6	Sessions Held for the County aforesaid.....	2 nd Ge° I
1716	Sept.	-	Common Pleas Held for the County aforesaid...	3 rd Ge° I
1717	March	5	Sessions Held for the County aforesaid.....	3 rd Ge° I
1717	March	6	Common Pleas Held for the County aforesaid...	3 rd Ge° I
1717	Sept.	3	Sessions Held for the County aforesaid.....	3 rd Ge° I
1717	Sept.	5	Common Pleas Held for the County aforesaid...	3 rd Ge° I
1718	March	4	Sessions Held for the County of Richmond....	4 th Ge° I
1718	March	5	Common Pleas Held at Stony Brook.....	4 th Ge° I
1718	Sept.	2	Sessions Held at Stony Brook	5 th Ge° I
1718	Sept.	4	Common Pleas Held at Stony Brook.....	5 th Ge° I
1719	March	3	Sessions Held at Stony Brook.....	5 th Ge° I
1719	March	5	Common Pleas Held at Stony Brook.....	5 th Ge° I
1719	Sept.	1	Sessions Held at Stony Brook.....	6 th Ge° I
1719	Sept.	2	Common Pleas Held at Stony Brook.....	6 th Ge° I
1720	March	1	Sessions Held at Stony Brook.....	6 th Ge° I
1720	March	2	Common Pleas Held at Stony Brook.....	6 th Ge° I
1720	Sept.	6	Sessions Held at Stony Brook.....	7 th Ge° I
1720	Sept.	7	Common Pleas Held at Stony Brook.....	7 th Ge° I
1721	March	7	Sessions Held at the Court House.....	7 th Ge° I
1721	March	8	Common Pleas Held at the Court House.....	7 th Ge° I
1721	Sept.	5	Sessions Held at the Court House.....	8 th Ge° I
1721	Sept.	6	Common Pleas Held at the Court House in said County of Richmond	8 th Ge° I

1722	March 6	Sessions Held at the Court House.....	8 th Ge° I
1722	March 7	Common Pleas Held at the Court House.....	8 th Ge° I
1722	Sept. 4	Sessions Held at the County House.....	9 th Ge° I
1723	March 5	Common Pleas Held at Stony Brook at the Court House	9 th Ge° I
1723	March 7	Sessions Held at the County Court House in & for &c	9 th Ge° I
1723	Sept. 3	Sessions Common Pleas Held at Stony Brook at the Court House in & for &c.....	10 th Ge° I
1723	Sept. 4	Common Pleas Held at Stony Brook at the Court House in & for &c	10 th Ge° I
1724	March 3	Sessions Held at Stony Brook at the Court House in & for &c	10 th Ge° I
1724	March 4	Common Pleas Held at Stony Brook at the Court House in & for &c	10 th Ge° I
1724	Sept. 1	Sessions	
1724	Sept. 2	Common Pleas Held at Stony Brook at the Court House in & for &c	11 th Ge° I
1725	March 2	Sessions Common Pleas Held at Stony Brook at the Court House in & for &c	11 th Ge° I
1725	March 3	Common Pleas Held at Stony Brook at the Court House in & for &c	11 th Ge° I
1725	Sept. 7	Sessions Held at Stony Brook at the Court House in & for &c	12 th Ge° I
1725	Sept. 8	Common Pleas Held at the Court House in & for &c	12 th Ge° I
1726	March 1	Sessions Held at the Court House in & for &c...	12 th Ge° I
1726	March 2	Common Pleas Held at the Court House in & for &c.	12 th Ge° I
1726	Sept. 6	Sessions Held at Stony Brook at the Court House.	13 th Ge° I
1726	Sept. 7	Common Pleas Held at Stony Brook at the Court House	13 th Ge° I
1727	March 7	Sessions Held at Stony Brook	13 th Ge° I
1727	March 9	Common Pleas Held at Stony Brook at the Court House	13 th Ge° I
1727	Sept. 5	Sessions Held at Stony Brook in & for said County	1 st Ge° II
1727	Sept. 7	Common Pleas Held at Stony Brook in & for said County	1 st Ge° II
1728	March 5	Sessions Held at Stony Brook	1 st Ge° II
1728	March 7	Common Pleas Held at Stony Brook at the Court House	1 st Ge° II
1728	Sept. 3	Sessions Held at Stony Brook	2 nd Ge° II
1728	Sept. 5	Common Pleas Held at Stony Brook	2 nd Ge° II
1729	March 4	Sessions Held at the Court House.....	2 nd Ge° II

1729	March 6	Common Pleas Held at Richmond Town in the co. aforesaid at the Court House.....	2 nd Ge° II
1729	Sept. 2	Sessions Held at the Court House at Richmond Town	3 rd Ge° II
1729	Sept. 4	Common Pleas Held at Richmond Town at the Court House	3 rd Ge° II
1730	March 17	Sessions Held at the Court House at Richmond Town	3 rd Ge° II
1730	March 17	Common Pleas Held at Richmond Town in the Co. of Rich ^d . at the Court House.....	3 rd Ge° II
1730	Sept. 22	Sessions Held at Richmond Town in the Co. of Rich ^d . at the Court House.....	4 th Ge° II
1730	Sept. 22	Common Pleas Held at Richmond Town in the Co. of Rich ^d . at the Court House.....	4 th Ge° II

That court was sometimes held at private or public houses may be inferred from the entry under date of March 2, 1714, that the Court of Sessions "adjourned till tomorrow at Ten of the Clock in the forenoon to ye North Side To Coll. Grahams" (Clute, 166).

Queen Anne died August 1, 1714. The captions of the records of both courts held the following September declare the terms to have been held in the thirteenth year of her reign (which commenced March 8, 1702), indicating that the justices had not been officially notified of her decease.

At the March term of the Sessions, 1715, license was granted for the location of the Dutch Church near the burying ground, probably at or near its present site at Port Richmond (Clute, 167).

No term of either court was held in September 1715, perhaps because the justices felt uncertain as to their tenure of office under the new monarch. The record of the March term, 1716, of the Court of Common Pleas is blank, except as referred to in the record of the March term of the Court of Sessions of the same year, which is here given in full.

Richmond fs. Att a Court of Sefsions held for the County aforefd
 March the 6th and In the 2^d year of His Majefties
 George by the Grace of God King of Great
 Brittain ffrence & Ireland Defend^r of the ffaith
 Annoq. Dom. 17¹⁵₁₆

Preft

Thomas ffarmar	}	Esq ^{rs}
Lamb ^t Garifone		
Nath ¹¹ Brittin		
Ab ^m Cole	}	
7 th day preft Aug. Graham		
Jos. Arofmith	}	

Ordered that the Names of those of fforeign birth who have
 Taken the oaths In this Court as by an Act of Afsembly Made In the
 first year of the Reign of our Sovereigne Lord George King of G^t
 Brittaine &c In this province of New York Declaring the privileges of
 forreigners being Naturalized According to the said Act, be Recorded in
 the Books of Records In our f^d Court And it is hereby Accordingly
 Entered as followeth Viz. :—

Paul Droilhet	}	—The Sixth day of March Co fefsions
John Latourette		
John Depuy		
Gerret Veghte		
Aron Prall		
David Ruffell	}	

Jacques Pollion	}	—The Seventh of March Co. Co. pleas
Sam ¹¹ Barnefs		
Rene Rezeau		
Henry de Money		
James Guyon		
David De bourepos		
Lewis Gitton		
James Seguin	}	

Entered y^e Order of Court In the Records of our said Court
 March the 7th In the 2^d year of His Majefties Reign p^r

Alex^r Stuart
 Clk. fefs pc.

At the March term of the Court of Sessions for the year 1717,
 Nicholas Britton was fined twelve shillings for his “misbehaviour
 to Nathaniel Britton, Esq. (Clute, 166),” possibly suggesting an
 explanation of the reason why Nicholas was cut off with six

shillings by his father Nathaniel in an unrecorded will dated June 1 and proved November 11, 1729, a copy of which may be found at page 150 of the New York Historical Society collections for the year 1902.

That the early court records were not kept in the courthouse would seem to follow from the following entry in the record of the Court of Sessions for the March term, 1740 (March 18, 13 George II).

"Daniel Corfen the present Clerk of the Court of seshions and Common Pleas for this County of Richmond having informed this Court that he has demanded of Daniel Stilwell the late Clerk of the said Courts the Books of Records of this County (always known of Right to be lodged in the Custody of the Clerk of this County for the time being) And that the said Daniel Stilwell hath refused to deliver unto him the f^d Daniel Corfen the s^d Books of Records: It is therefore Ordered by the Court that the said Daniel Stilwell shall forthwith upon sight of this Order (A true Copy hereof being first delivered to him) or upon notice of this Order deliver unto the said Daniel Corfen all the Books aforefaid and other Records of the sd Court And that &c Pain & Peril that shall fall thereon."

By an act of the General Assembly of the Province of New York passed November 1, 1683, provision was made for the naturalization of alien settlers professing Christianity. Naturalization of persons actually settled in the Province was effected by taking and subscribing the oath of allegiance. Future settlers might become naturalized by a special act of the assembly, after taking the oath of allegiance.

The act of November 1, 1683, was recited in full in the subsequent act of July 5, 1715. The substantial provisions of the latter act are as follows:

I. All persons of foreign birth inhabiting within the Colony prior to November 1, 1683, and since deceased, having been seized of lands, were deemed to have been naturalized, their deeds and wills were declared valid conveyances, and titles held thereunder were confirmed.

II. Every person of foreign birth, living on July 5, 1715, who had inhabited within the Colony prior to November, 1683, was deemed to have been naturalized, their deeds and wills were to be held valid, and titles thereunder, present and prospective, were confirmed.

III. All persons of foreign birth who had settled in the Colony after November 1, 1683, who had purchased lands and had died seized thereof or who had had conveyed the same, were deemed to have been naturalized, with like effect.

IV. All persons of foreign birth, being Protestants, living on July 1, 1715, and inhabiting within the Colony, might become naturalized, on taking the oaths by law appointed, subscribing the test and taking the abjuration oath before any Court of record of the County within nine months and paying the legal fees of Court and clerk.

V. Persons of foreign birth inhabiting within the Colony and dying prior to the expiration of the nine months were deemed to have been naturalized.

1 Laws of the Colony of New York, page 85.

Governor Francis Lovelace directed Jacques Cortelyou to lay out new lots in addition to the lots at the Old Town and to lay out a village for forty settlers at the Great Kill, and to lay out the Great Kill Salt Meadow in ten acre lots.

The French Map of the Great Kill vicinity may have been Jacques Cortelyou's return to the warrant of Survey. The two villages indicated may have been his selection of sites therefor. See Volume I, Council Minutes in the library of the Association.

Was the proposed village near the Great Kill, Dover?

Jacques Guyon, 1st, left all his property to his widow Sarah, daughter of Philippe Casier. If Sarah was foreign born and un-naturalized, and if she died intestate, and if Jacques Guyon 2d was her son and had been born without the Province of New York, his naturalization would seem to have been necessary to enable him to sell or devise his land, or to give his heirs good title by descent.

Ice Phenomena at Prince's Bay during the Recent Cold Weather¹

HOWARD H. CLEAVES

(WITH PLATE 3)

During the three days from December 29, 1917, to January 2, 1918, inclusive, the climax was reached of the severest period of cold which this vicinity has experienced for many winters, and on the night of December 30-31 the mercury registered the record-breaking temperature for Staten Island of 14° below zero.

Newspaper accounts of the cold and its attendant conditions in Greater New York and vicinity are of too recent date to require reference or comment at this time. Descriptions of certain local phenomena and events, however, are worthy of being placed upon record, as their like may never occur again.

The lower part of Raritan Bay was almost completely frozen over from Staten Island to New Jersey. On January 5 Elmer Juhl, Albert Juhl, and Fernando Morin, residents of Richmond Valley, walked on the ice from Mount Loretto, Prince's Bay, by way of the interstate boundary monument, to Lawrence Harbor, near the mouth of Cheesequakes Creek, New Jersey, and returned by the same route. In so doing it was necessary for them to cross both the north and the south channels of the bay, through which in ordinary seasons it is common to see large sailing vessels and tramp steamers passing.

Elmer Juhl, who personally related the facts to me, also stated that he knew of a number of others who had crossed from Staten Island to New Jersey. Such crossing was commonly practised for several days, by workmen passing between Tottenville and Perth Amboy north of the course kept open by the steamboats of the Tottenville and Amboy ferry.

¹ Presented at the meeting of the Association January 19, 1918.



FIG. 1



FIG. 2

CLEAVES: Ice Phenomena

On January 6 the region in the vicinity of Prince's Bay was visited, in company with Dr. Arthur Hollick, and at his suggestion photographs were taken by me from which lantern slides have been made, to illustrate certain features of interest which were observed.

The entire surface of the bay was frozen over and many people were out on the ice, some skating, one on a motorcycle² and one on a bicycle³ (PL. 3, F. 1). Can buoy No. 5, which marks the steamship channel, was just within the outer area of consolidated drift ice, and two adventurous boys⁴ walked out and perched upon the buoy at our suggestion, in order to lend a touch of human interest to the picture.

By selecting the point of view pictures could be obtained which might easily be imagined to represent arctic conditions. Two such were taken, showing the edge of the piled up drift ice, in the vicinity of the S. S. White Dental Works. One of these pictures is shown in PLATE 2, F. 2.

Apparently there were other explorers on the same date more venturesome than we were inclined to be, if we may accept the verity of the following note in the *Richmond County Advance* of Friday, January 11:

Raritan Bay Not Safe for Skaters

Angelo Carlo and Eugene Glavin skated across Raritan Bay to Keyport on Sunday. They started from the Mount Loretto dock and covered the distance in 50 minutes. On the return trip Carlo fell through the ice and was rescued by his companion with the aid of a hockey stick. Numerous spots in the bay are said to be unsafe for skaters.

Incidentally it is interesting to note that a flock of three canvasback ducks, *Marila vallisneria* (Wils.), were observed in one of the open patches of water close to this edge of the ice. There is no previous record, so far as I am aware, of the canvasback having been seen in Staten Island waters, and this adds another species to our list of transient bird visitors.

² Alfred Austin of Pleasant Plains.

³ Everett Polhemus of Prince's Bay.

⁴ Daniel McCarthy and Joseph Monohan of Mount Loretto.

Quercus heterophylla in the Clove Valley¹

ARTHUR HOLLICK

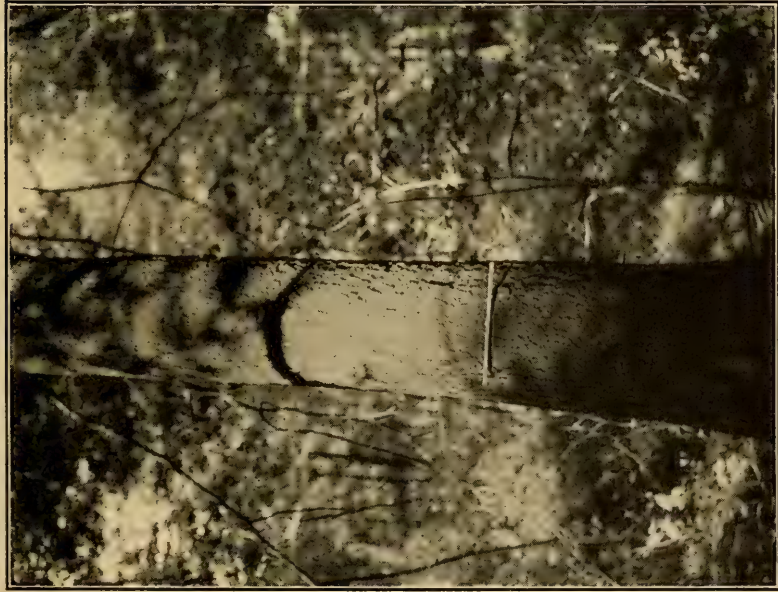
(WITH PLATE 4)

On August 13, 1917, Mr. Frank Allatt, of 358 Forest Avenue, brought to the museum for identification some oak leaves that were typical *Quercus heterophylla* Michx. I casually remarked to him, "You have evidently been collecting in the vicinity of Tottenville"; but to my unbounded surprise he stated that the leaves had been collected from a tree growing in the vicinity of Clove Lake, and at my request he made a rough map of the locality for guidance in locating it. Within a few hours I was out there with the map and had no difficulty in finding the tree. It is about forty feet high, symmetrical and well proportioned, with a trunk four feet three inches in circumference (about 1 ft. 4 in. diameter) at a distance of two feet above the ground.

On September 12 the tree was again visited, in company with Mr. William T. Davis, Mr. Howard H. Cleaves, and Mr. Alexander Gershoy of the New York State College of Agriculture. Photographs were taken by Mr. Davis and Mr. Cleaves. (PLATE 4.) On September 16 Dr. N. L. Britton also accompanied me on a visit to the tree.

The presence of the tree in this locality represented what at first appeared to be a problem for which no reasonable explanation could be suggested. The only other known specimens of its kind on Staten Island are those in the vicinity of Tottenville, distant about twelve miles, and the theory that an acorn could have been transported that distance by any natural agencies and had fortuitously germinated in the Clove Valley, seemed an

¹ Presented at the meeting of the Section of Natural Science April 13, 1918.



HOLLICK: *Quercus heterophylla* in the Clove Valley

almost impossible one, especially in view of the adverse intervening topographic features. The alternative theory of the former existence of any parent tree in the Clove Valley seemed likewise to be an extremely improbable one, in view of the proved hybrid origin of *Q. heterophylla*, which would require that at least one mature tree of *Q. Phellos* L. must also have been growing there in comparatively recent times, and the presence of any such conspicuous tree or trees could hardly have escaped detection by those who have explored the woods and examined the trees of the region every year during the past forty-seven years.

Mr. Davis, however, has supplied the testimony which appears to offer a reasonable explanation, if not the actual solution of the problem. He has informed me that on October 27, 1888, he collected acorns from the Tottenville trees and planted a number of them in the Clove Valley. A reasonable assumption, therefore, seems to be that the tree in question most probably originated from one of these acorns and that the tree is now twenty-nine years old.

In this connection it is of interest to calculate the theoretical age of the tree from its dimensions and the known rate of growth of other individuals of the same species, and to note how the results arrived at compare with our assumption in regard to its probable origin and age. Certain definite data are, fortunately, at our disposal as a basis for such a calculation.

On September 30, 1911, a one-year-old seedling *Q. heterophylla*, about one foot in height,, was collected at the Tottenville locality by Mr. Norman Taylor and planted in the Brooklyn Botanic Garden. On September 17, 1917, I visited the Garden for the special purpose of examining this seven-year-old tree, on which occasion the following facts were noted and calculations made:

Height of tree 10 feet, circumference of trunk 4.7 inches (= about 1.5 in. diameter), maximum spread of branches 6 feet.

The indicated rate of vertical growth, ten feet in seven years, would result in a tree a few inches over forty feet in height in

twenty-nine years, which agrees exactly with the height and assumed age of the Clove Valley tree.

The indicated rate of lateral growth, however, about an inch and a half in seven years, would result in a trunk only about a foot and a half in circumference, or six inches in diameter, at the end of the same period of time. This apparent discrepancy may, however, be accounted for by the probable retardation of lateral growth due to transplanting, in the case of the seedling tree, or to constantly increasing vigor in lateral relative to vertical growth, in the more mature tree.

No matter what we may assume, however, in regard to the origin and age of the tree, the interesting facts are that this individual specimen is there, and that it is the northernmost representative of its species growing in a natural, wild environment, so far as there is any record known to me.

Note.—Since the above was written my attention has been called to a paper by Dr. N. L. Britton (Notes on the Relative Age and Dimensions of a Number of Different Trees, Bull. Torrey Club 6: 310. May 1879) in which the following data are recorded in regard to the "black oak" (*Quercus rubra* L. ?) which is one of the parent species of *Q. heterophylla*.

Average annual increase in height = .94 ft.

Average annual increase in diameter = .47 in.

These figures indicate a height of 27.26 ft., and a diameter of 1.135 ft., for a twenty-nine-year-old tree. Apparently the average vertical growth is less and the average lateral growth greater than in *Q. heterophylla*. If similar data could be obtained in regard to *Q. Phellos*, the other parent species, some interesting comparisons might result.

Literature Relating to Staten Island

LETTERS AND DIARY,¹ AND POEMS² OF ALAN SEEGER

Alan Seeger was born in New York June 22, 1888, joined the Foreign Legion of France in September 1914, at the outbreak of the European war, and was killed in action on the battlefield of Belloy-en-Santerre July 4, 1916. He had, therefore, only just passed his twenty-ninth birthday when he met his death.

During the first ten years of his life he resided on Staten Island and is remembered by many of us, especially, no doubt, by those who were his fellow students at the Staten Island Academy. He may, therefore, be included among our local literati, even though his literary work was all accomplished after his departure from our island.

A short account of the life of the author, and comments on the literary merits of his writings may be found in the volume of poems, in the introduction written by William Archer. Whether it was heredity or environment that was the most important factor in influencing the mental and the resultant physical activities of Alan Seeger would be merely a matter of inference. Archer says, in commenting on the Seeger family residence, which was on Fort Hill: "From their home on the heights of Staten Island the children looked out day by day upon one of the most romantic scenes in the world—the gateway to the Western Hemisphere. . . . In the foreground lay Robbin's Reef Lighthouse, in the middle distance the Statue of Liberty, in the background the giant curves of Brooklyn Bridge, and, range over range, the mountainous buildings of 'downtown' New York

¹ Letters and Diary | of | Alan Seeger | New York | Charles Scribner's Sons | 1917. 8° cloth, 218 p., *frontispiece portrait of the author*.

² Poems | by | Alan Seeger | with an introduction | by | William Archer | New York | Charles Scribner's Sons | 1917. 8° cloth, 174 p.

. . . and the incoming stream of tramps and liners met the outgoing stream which carried the imagination seaward, to the islands of the buccaneers, and the haunts of all the heroes and villains of history, in the old world. The children did not look with incurious eyes upon this stirring scene . . . the walls of their nursery were covered with their drawings of the shipping. . . . They were of an age, before they left Staten Island, to realize something of the historic implications of their environment."

One feature, at least, of his early surroundings left its impress upon his memory, and we find it embodied in the poem entitled *The Old Lowe House, Staten Island*, which we infer to mean the old Daniel Low mansion, located close to where he lived and with which he must have been familiar:

. . . Relic of a romantic taste gone by,
This stately monument alone remains,
Vacant, with lichened walls, and window panes
Blank as the windows of a skull. But I,
On evenings when autumnal winds have stirred
In the porch vines, to this gray oracle
Have laid a wondering ear and oft times heard,
As from the hollow of a stranded shell,
Old voices echoing (or my fancy erred)
Things indistinct but not insensible.

The literary merits of Seeger's writings have been discussed by others more competent for the work than the reviewer. To the reviewer the interest attaching to his writings is not concerned with the features which enlist the attention of the literary critic—the choice of words or phrases, or the rhythm of verses—but in what they reveal or indicate of the underlying mental processes—the ideas, impulses and convictions of the author—of which his writings are the outward expression.

Alan Seeger was an evolutionist and a fatalist. He was evidently a firm believer in the doctrine that "whatever *is* is right," because everything that happens is foreordained and inevitable. This mental attitude is well expressed in his poem *The Hosts*:

. . . Let idlers argue the right and wrong
And weigh what merit our causes had.
Putting our faith in being strong—
Above the level of good and bad—
For us, we battled and burned and killed
Because evolving Nature willed,
And it was our pride and boast to be
The instruments of Destiny. . . .

And again, in Maktoob:

. . . Within the book of Destiny,
Whose leaves are Time, whose cover, Space,
The day when you shall cease to be,
The hour, the mode, the place,

Are marked, they say; and you shall not
By taking thought or using wit
Alter that certain fate one jot,
Postpone or conjure it.

Learn to drive fear, then, from your heart.
If you must perish, know O man,
'Tis an inevitable part
Of the predestined plan. . . .

Many of his poems show a passionate love of life and all its pleasures, verging upon the sensuous at times, in the frank exuberance of his youth, as when he says:

. . . What is so fair as lovers in their joy
That dies in sleep, their sleep that wakes in joy?
Caressing arms are their light pillows. They
That like lost stars have wandered hitherto
Lonesome and lightless through the universe,
Now glow transpired at Nature's flaming core;
They are the center; constellated heaven
Is the embroidered panoply spread round
Their bridal, and the music of the spheres
Rocks them in hushed epithalamium.
. . . I ask nought else
Than reincarnate to retrace my path,
Be born again of woman, walk once more
Through Childhood's fragrant, flowing wonderland

And, entered in the golden realm of Youth,
 Fare still a pilgrim toward the copious joys
 I savored here, yet scarce began to sip. . . .

Coincidentally, however, his fatalism made him absolutely contemptuous of death, without any affectation of self-sacrifice or any marring trace of mock heroism.

Each of these dominant mental characteristics is well exemplified in his already widely known poem, *I Have a Rendezvous with Death*:

I have a rendezvous with Death
 At some disputed barricade,
 When Spring comes back with rustling shade
 And apple blossoms fill the air—
 I have a rendezvous with Death
 When Spring brings back blue days and fair. . . .
 God knows 'twere better to be deep
 Pillowed in silk and scented down
 Where Love throbs out in blissful sleep,
 Pulse nigh to pulse, and breath to breath,
 Where hushed awakenings are dear.
 But I've a rendezvous with Death
 At midnight in some flaming town,
 When Spring trips north again this year,
 And I to my pledged word am true,
 I shall not fail that rendezvous.

A. H.

JUNIPERUS COMMUNIS ON LONG ISLAND AND STATEN ISLAND²

This is a concise account of the former and present known localities for the juniper, *Juniperus communis* L., on Long Island and Staten Island. On our island the species, to the best of our knowledge, became extinct on the death, about 1892, of the last of the few individuals that formerly grew in the grove of cedar trees, *Juniperus virginiana* L., along the beach near New Dorp.

It is interesting to note that on Long Island there are recorded several widely separated stations where specimens of this locally rare tree are growing.

A. H.

² Wm. T. Davis. *Torreyana* 17: 99, f. 1. June 1917.

CATSKILL WATER SUPPLY⁴

From whence, exactly, do we get our present main water supply on Staten Island, and how is it delivered to us? Many official reports, popular articles and newspaper accounts dealing with this subject have been published during the past decade; but none contains clearer and more concise descriptions, more complete statistical data, and better selected illustrations than may be found included in this neatly printed, well illustrated, and popularly written pamphlet.

The course of the water may be traced on the map through portions of ten counties, from the Schoharie drainage basin, 120 miles distant from us to the Ashokan reservoir, and thence by the great aqueduct to its terminus in the Silver Lake reservoir. The elevation of the former is 590 feet above tide level and that of the latter 228 feet. The water, therefore, comes to us by gravity, and it takes about three days to make the journey, passing in its travels four times beneath the lower Hudson River and its confluences: the Harlem River, the East River, and New York Bay.

The illustrations of local interest are (p. 6) a view of Silver Lake reservoir, filled with water, looking south from the north-east end; (p. 12) sections of the north dike and basin and south dike and basin of the same reservoir; (p. 64) sectional view, showing the method of laying the connecting siphon from Long Island to Staten Island under the waters of New York Bay.

In brief, this is an interesting little municipal handbook of information, containing facts and figures with which every citizen of Greater New York should be familiar as a matter of civic pride, if for no other reason.

A. H.

⁴ Catskill Water Supply | A. General Description | and | Brief History | Board of Water Supply | of the City of New York | October, 1918. Pamph. 8°, 67 p. *plates, figures, diagrams and maps*, 70 +.

CATSKILL AQUEDUCT CELEBRATION PUBLICATIONS⁵

This neatly bound volume consists of the descriptive catalogs and pamphlets issued by twelve of the Greater New York organizations and institutions that prepared and installed exhibitions in connection with and on request of the Mayor's Catskill Aqueduct Celebration Committee.

The catalog of our museum exhibits, although it includes but four pages, compares very favorably, in so far as its contents are concerned, with its companions. Two features, especially, which can hardly fail to be noted, are that each and all of our exhibits were strictly pertinent to the occasion, and that they were replete with local interest and significance.

One item worthy of particular attention is in reference to the old wooden water mains of Manhattan. Sections of these were included in several of the exhibits, but our specimen was the only one in which the kind of wood from which it was made was definitely determined. The original specifications in regard to these mains provided that "these logs must be of good pitch pine."⁶ Whether or not this meant *Pinus rigida* Mill., which is the species popularly known as pitch pine today, we do not know; but we do know that the particular log in our possession is *Pinus Strobus* L., or white pine;⁷ from which it may be argued that there are certain advantages in a museum which combines both historical and scientific research in its activities.

The twelve pamphlets that comprise this volume together form a comprehensive and instructive story of the evolution of a water supply coincident with the growth of a community; and anyone specially interested in the evolution of our local conditions may

⁵ Catskill Aqueduct Celebration | Publications | A Collection of Pamphlets Published in Connection with the Celebration of the Completion of the Catskill Aqueduct, etc. | Arranged by | George Frederick Kunz, Ph.D., ScD. | Chairman of the Committee on | Art, Scientific and Historical Exhibitions. | The Mayor's | Catskill Aqueduct Celebration Committee | New York, 1917. 8° cloth.

⁶ New York Gazette and Weekly Mercury, Sep. 5, 1774, *vide* New York Hist. Soc. Bull. 1: 64. Oct. 1917.

⁷ PROC. NAT. SCI. ASSOC. STATEN IS. 9: 50. May 20, 1905.

find references to practically everything that has been published on the subject in the list of twenty-nine works and articles in the library of our museum, mentioned under item No. 13 of our Aqueduct Celebration catalog of exhibits.

A. H.

ENGLISH CROWN GRANTS⁸

This little volume was written with an avowed object in view that is outlined in the "Foreword" and is discussed in its various aspects in the subsequent chapters. In the former it is stated that "the American bar associations, historical societies, colonial organizations, and all thoughtful citizens have vital interest in the unique history and present-day dominating influence, in America, of the old English crown grants. . . . The English crown grants of lands on Staten Island have been selected by the author as the most diversified, yet favorable grouping of grants to illustrate the discussion of the problems involved."

Pages 27-53 include a presentation and discussion of facts and claims in relation to the crown grants of land on Staten Island; but, in order to thoroughly understand the points involved, the author's previous work, *The Major and the Queen*,⁹ should be read first. The crux of the discussion may be inferred from the statement that "the records of the state of New York . . . disclose a large number of crown grants of Staten Island lands, issued to various parties. These grants, exclusive of the last and final grant, were originally intended to cover about one half of Staten Island. The last, final and inclusive grant, issued to Lancaster Symes, covered all of the remaining lands on Staten Island,

⁸ English Crown Grants | by | S. L. Mershon | Member of | The National Geographic Society, Washington, D. C. . . . Staten Island Institute of Arts and Sciences; etc. | Author of | *The Major and The Queen* | *The Foundation of Colonial Land Titles* | under English Common Law | New York | The Law and History Club | Publishers, 39 Cortlandt Street. 12^{mo} cloth, 266 p, copyright, 1918, by S. L. Mershon.

⁹ R. H. Beam & Co., publishers, New York, 1915. Reviewed in *PROC. STATEN IS. ASSOC. ARTS AND SCI.* 6²: 152.

together with various rights appertaining thereto and at the time belonging to the English crown. . . ."

All legal rights and title to these lands were claimed by the Symes Foundation, by and from whom they were transferred to the Lancaster Symes Estate on Staten Island.

Pages 236-266 include a chapter on the Symes Foundation and the Lancaster Symes Estate. The matter included in this chapter was also printed in legal form as a separate publication under date of July 2, 1917, and more or less widely distributed. We do not pretend to any knowledge in regard to what that august entity, The Law, may think of the claims embodied in the legal instruments that are given verbatim in this chapter; but they are interesting to any student of local history; and optimists, pessimists, or plain ordinary skeptics will find in them inspiration for expressions of opinion in regard to the apparent altruism that influenced those whose signatures are attached to and whose names occur in connection with the instruments mentioned.

The volume is replete with historical facts; and the special facts, discussions and arguments in relation to the grant of lands on Staten Island to Major Lancaster Symes by Queen Anne may be found in two chapters, one on under-sea lands and land grants and one on an analysis of the Symes grant, on pages 129-135 and 182-202, respectively. The latter is of special interest to the lay reader as an example of the course of reasoning employed by the members of the legal profession in the interpretation of the assumed intent and meaning of words and phrases.

A. H.

PETITION AND PROTEST IN REGARD TO RIPARIAN GRANTS ETC. ON STATEN ISLAND¹⁰

This is a document, printed in legal form, "in the matter of Riparian Grants by the State of New York to lands on Staten

¹⁰ State of New York | Petition | and | Protest | to | The Honorable Francis M. Hugo | Secretary of State, Albany, N. Y. | by | S. L. Mershon. Pamph. roy. 8°, 15 p. Mar. 25, 1918.

Island, *also* Leases by the State of New York of submerged lands in the waters of Staten Island." In particular it is an argument on behalf of the claims and objects of the much discussed Symes Foundation.

Of especial interest to us is the fact that the Staten Island Institute of Arts and Sciences is specifically designated as one of the proposed beneficiaries in the event of the objects of the Foundation being accomplished.

This document may be regarded as an appendix or a sequel to the work previously reviewed.

A. H.

THE COURSEN (CORSON) FAMILY¹¹

This is a genealogical record, together with copies of grants, wills, and other instruments in connection with which the Coursen (or Corson) family was concerned. The plates include a portrait of the author, a picture of his residence at Huguenot Park, Staten Island, and a reproduction of an old sketch of Manhattan Island made about 1650.

The genealogical records begin with "Peter Coursen the first French Huguenot Emigrant from France to New Amsterdam in 1612," and ends with the issue of Cornelius Corson 7th, who died in 1900.

The author notes as a peculiar coincidence, that Arendt Coursen, in 1642, gave a power of attorney to one Covert Lookerman (whose family name was subsequently changed to Lookman and finally to Lockman) the direct ancestor of Samuel Lockman, the great great grandfather of the author, whose daughter Henrietta Maria married Richard Corson in 1820.

A. H.

¹¹ The Coursens | From 1612 to 1917, compiled from Ancient and Modern Records, with the Staten Island Branch | By | Percival Glenroy Ullman. 8° cloth, 88 p. 3 pl. No date or place of publication.

EARLY HISTORY OF STATEN ISLAND¹²

This modest brochure bears several evidences of haste or carelessness in its preparation. On the cover the title appears as "A Short History of Staten Island"; but the title page designates the work as "Early History of Staten Island," while in his kindly letter of transmittal the author refers to it under the title first mentioned; so that the question is an open one in regard to the title under which it should be catalogued and cited.

It is fittingly dedicated to Mr. Ira K. Morris, "whose history of Staten Island has endeared him to all those who love Staten Island, and whose indefatigable and painstaking historical researches of many years have challenged the admiration of those interested in the history of our Island." This dedication is dated May 1918, which we may, therefore, assume to be approximately the date of publication, although it does not appear on the title page.

The author states, in the introduction, that "the desire to awaken in the hearts of the growing generations of Staten Islanders an interest and a love for their native island have induced the writer to present this short history."

It is, frankly, a compilation of such events and incidents, gleaned from general sources of information, as the author deemed to be of special interest or significance. It is unfortunate, however, that dates are omitted in connection with many events of importance, thus detracting from their main historic value and interest. The absence of pagination numbers is also a drawback, so far as ease and accuracy of reference and citation is concerned.

A. H.

¹² Early | History | of | Staten Island | By | Cornelius G. Kolff. 8° pamph. 32 p. May 1918(?).

Records of Meetings

MEETINGS OF THE ASSOCIATION

REGULAR MEETING, OCTOBER 20, 1917

The meeting was held in the assembly hall of the Museum, 154 Stuyvesant Place, Staten Island.

President Howard R. Bayne in the chair and eighteen persons present.

The minutes of the annual meeting of May 19, 1917, were read and approved.

The president, in order that a record be entered on the minutes, made formal announcement of the laying of the cornerstone of the new museum building only a few hours previously (Saturday afternoon, October 20, 1917) and expressed the hope that as full an account as possible of the function and its attendant ceremonies would be, later, prepared for publication in the PROCEEDINGS. (See this issue, p. 77.)

Dr. Arthur Hollick exhibited and discussed two interesting museum accessions, as follows:

1. A lithograph, 3 ft. \times 2 ft. in size, entitled *Panorama of the Harbor of New York, Staten Island and the Narrows*. The printed text in connection with it is: "Published by Goupil & Co., 366 Broadway, New York. Drawn from Nature & on Stone by John Bornet. Print by Nagel and Weingartner N. Y. Entered according to Act of Congress in the year 1854 by Nagel and Weingartner in the Clerk's Office of the District Court of the Southern District of N. Y."

This is the item mentioned in the August issue of the BULLETIN, and secured through the generosity and prompt action of Mr. Charles D. Durkee. It is the largest and in several of its features one of the most interesting of the many views of Staten Island included in our collection of old prints and engravings issued prior to days of photography. Certain of the topographic features are more or less exaggerated, but almost every prominent residence of the time when the picture was made is faithfully depicted in every architectural detail, especially those at Clifton, which locality is the initial point of view of the picture.

It may also be of interest to compare it with this smaller colored lithograph included in our collection, entitled "*The Narrows, New York Bay. From Staten Island*," published by Currier and Ives, 152 Nassau street, New York. This view is taken from the top of Pavilion Hill, Tompkinsville, looking toward the Narrows, and therefore represents a viewpoint opposed to the other. It is not dated; but inasmuch as the fort at the

water edge of the Narrows is shown, which feature is not included in the larger picture, we may assume that this smaller one was issued subsequent to 1854.

2. Four skins of the greater bird of paradise, *Paradisia apoda*, with an account of the manner in which they came into the possession of the Association. (See this issue, p. 1.)

Doctor Hollick referred to the Catskill Aqueduct Celebration Exhibit, now on display in the Museum, prepared in cooperation with the subcommittee on Art, Scientific and Historical Exhibitions of the Mayor's Catskill Aqueduct Celebration Committee, and gave a brief outline and description of the features included in the exhibit. (For report and complete descriptive catalog see this issue, p. 5.)

Mr. William T. Davis read a paper, illustrated by photographs, entitled Does the Silver Lake Reservoir Leak Excessively? (See this issue, p. 13.)

Mr. Davis also exhibited a small specimen of a ground rattlesnake, *Sistrurus miliarius* Linn., preserved in alcohol, and read an account of his personal experiences in connection with it, under the title Bitten by a Rattlesnake. (See this issue, p. 15.)

The meeting then adjourned.

REGULAR MEETING, NOVEMBER 17, 1917

The meeting was held in the assembly hall of the Museum, 154 Stuyvesant Place, Staten Island.

President Howard R. Bayne in the chair and forty-five persons present.

The minutes of the meeting of October 20, 1917, were read and approved.

Mr. S. McKee Smith presented the following resolutions, which will be acted upon at the next regular meeting of the Association:

Resolved, that in view of the prospective future development of the Museum of the Association and the nature of the public educational activities which it maintains and fosters it is advisable that the corporate name of the Association be changed from Staten Island Association of Arts and Sciences to Staten Island Institute of Arts and Sciences.

Resolved, that the Board of Trustees be and is hereby requested to take such action as may be necessary to legalize and effect the change in name above suggested, and that the Constitution and Bylaws of the Association be thereupon declared amended in conformity therewith.

Mr. Howard R. Bayne exhibited a photographic reproduction of an old map, without date or title, representing a portion of Staten Island in the vicinity of Great Kill. The map was recently received from Dr. James Sullivan, State Historian, Albany, N. Y., together with the following memorandum:

"If you will examine . . . the map . . . and place it alongside a map of Staten Island you will see that it represents the coast line along the sea (designated on this map 'la mer' and 'mer') and that 'La grand Kil' corresponds to the Great Kill of Staten Island.

"The village represented at the middle and near the bottom of the map I have not been able to locate by name. The village at the left side of the map was probably New Dorp. As you will notice, in various places on the map, the land is designated as 'foin doux,' which means fresh meadow, and 'foin salé,' which means salt meadow. . . .

"The line designated 'la ligne,' a little above the center of the map, may refer to the point of the compass; but it is not strictly accurate. What the two crossed lines at the bottom may mean is not clear to me. They may represent merely calculating lines used by the surveyor in making his map.

"The original map is included in Land Papers, vol. 1, p. 99, Secretary of State's Office, Albany, N. Y., among papers dated 1676; but this date is uncertain for the reason that such papers are frequently mixed up and are slipped in under years to which they do not belong."

Mr. Charles W. Leng exhibited cotypes of two new species of water beetles, recently described from Staten Island specimens, and read the following note:

"In the Journal of the New York Entomological Society for September 1917, Prof. H. C. Fall of Pasadena, Cal., describes several new Dytiscidæ. Among these are two species for which Staten Island is the type locality. *Bidessus suburbanus* was found by Mr. John D. Sherman, Jr., 'in a pond in the woods' which he tells me is still in existence (though Prof. Fall says 'no longer existing' from some misunderstanding), near the Moravian cemetery, to which he was guided by Joseph C. Thompson. *Hydroporus shermani* was taken 'in fresh running water,' which Mr. Sherman tells me means the Moravian Brook flowing through the golf links of the Richmond County Country Club. Both captures were made several years ago, in the course of collecting with Joseph C. Thompson, the late C. H. Roberts, and myself; and it has taken Mr. Sherman much longer to study the status of the specimens than it took us to guide him to the Staten Island ponds and brooks in which water beetles abound."

Mr. Howard H. Cleaves exhibited a potato, weighing 2 lbs. 5 oz., grown in Colorado and donated to the museum by Mr. Walter Mayer.

ANNOUNCED PROGRAM

Mr. Arthur A. Michell gave a lecture, illustrated by lantern slides, on Egypt the Land of the Pharaohs.

The meeting then adjourned.

REGULAR MEETING, DECEMBER 15, 1917

The meeting was held in the assembly hall of the Museum, 154 Stuyvesant Place, Staten Island.

President Howard R. Bayne in the chair with twenty-five persons present.

The minutes of the meeting of November 17, 1917, were read and approved.

The resolutions presented by Mr. S. McKee Smith at the November meeting of the Association, proposing a change in the corporate name of the Association to Staten Island Institute of Arts and Sciences, were unanimously adopted.

ANNOUNCED PROGRAM

Dr. James Sullivan, State Historian and Director of the Division of Archives and History, State Department of Education of the University of the State of New York, gave a lecture on The Battle of the Marne, illustrated with lantern slides explanatory of the army units engaged and the military tactics and strategy involved in attack and defense.

The meeting then adjourned.

REGULAR MEETING, JANUARY 19, 1918

The meeting was held in the assembly hall of the Museum, 154 Stuyvesant Place, Staten Island.

First vice-president William T. Davis in the chair and nineteen persons present.

The minutes of the meeting of December 15, 1917, were read and approved.

Mr. William T. Davis referred to the death on December 19, 1917, of Louis Pope Gratacap, who was one of the oldest members of the Association, and president of the Natural Science Association of Staten Island from November 1887 to November 1889. Mr. Davis read an appreciative obituary notice and a list of his contributions to the PROCEEDINGS of the Association. (See this issue, p. 19.)

Dr. Arthur Hollick exhibited a bound volume of the Richmond County Mirror, volume 1, July 1837-July 1838, which was made the subject of a communication presented at a meeting of the Section of Historical Research held January 12. (See this issue, p. 55.) Doctor Hollick referred particularly to the frontispiece of the volume, a steel engraving representing the water front of New Brighton, and read the following explanatory text, printed as the leading article on the first page of the first number:

"The view of New Brighton, which accompanies this number, is from a Steel Plate from a painting designed expressly for this work by Chapman. . . . The subject was selected not only for its breadth of landscape and the boldness of the hills that tower behind the village in the foreground, but also as the seat of the newest and most stately settlement on the Island, and we may say, in the country. . . The subject, moreover, being new and un-worn, is the more interesting and piquant in proportion as it is unknown: and anything calculated to elucidate the matter of the rising up of this village from the chaotic wilds of the '*north shore*'—like Venus from the sea—growth that played around the mutilated body of Uranus—will undoubtedly be perused with interest and attention.

"This village was commenced by the individual enterprise of THOMAS E. DAVIS ESQ. but its commanding site and its proximity to the great metropolis of the west, soon arrested the attention of several gentlemen who formed an Association for the purpose of inducing Mr. Davis to part with portions of his purchase—they succeeded, and the extensive improvements which have since been effected, are the results of the united taste and enterprise of the members of the N. Brighton Association.

"The village is situated about one mile's distance from the village of

TOMPKINSVILLE . . . from the many advantages of its location—its salubrious and invigorating air—its extent of prospect, and the game with which its adjuncts abound—it promises fair to be one of the most frequented watering places in the country;—at once among the most costly and magnificent ornaments of the land, and of incalculable benefit to its environs."

ANNOUNCED PROGRAM

Mr. Howard H. Cleaves gave an account, illustrated by original photographs and lantern slides, of Ice Phenomena at Prince's Bay during the Recent Cold Weather. (See this issue, p. 30.)

Dr. Arthur Hollick supplemented Mr. Cleaves' account by exhibiting two newspaper illustrations in connection with former severe winter conditions in the vicinity, viz.:

1. Sleighing on Staten Island Sound opposite Elizabethport, N. J., during the winter of 1874-75, from Harper's Weekly, March 13, 1875. (See also PROC. STATEN IS. ASSOC. ARTS. AND SCI. 5: 114. Meeting of February 19, 1915.)

2. The Staten Island ferryboat *Westfield* caught in the ice in the East River, February 8, 1895, from the New York World, February 9, 1895.

Mr. William T. Davis mentioned several previous cold spells and read records in connection with them from his journal, remarking that, although lower records were recorded in nearby localities during these cold snaps, none equalled that of the present winter for the relatively long duration of the severe cold or for its record-breaking low temperature on Staten Island.

The meeting then adjourned.

REGULAR MEETING, FEBRUARY 16, 1918

The meeting was held in the assembly hall of the Museum, 154 Stuyvesant Place, Staten Island.

President Howard R. Bayne in the chair and twenty-five persons present.

The minutes of the meeting of January 19, 1918, were read and approved.

Mr. Alanson Skinner exhibited and described a collection of Indian relics personally collected at Mariner Harbor, where evidences of village sites, and many graves, fire pits, etc., had been unearthed in a number of localities during the extensive commercial development of the region in 1903 and subsequently, especially in a hill near De Hart's brook.

In addition to fragments of pottery and a number of stone implements, the objects shown included oyster, scallop, and clam shells, fragments of the blue crab, and bones of deer, raccoon, wild turkey, diamond-back terrapin, and other remains of the food supplies on which the aborigines depended.

Apparently these evidences of Indian occupation must have dated back to about 1675 or earlier, as no trace of the influence of white civilization was found in connection with them.

50 STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES

By permission of the Museum of the American Indian, under whose auspices the explorations were made, the collection was presented to the museum of the Association.

Mr. Skinner also presented a part of an old flint-lock musket, with the flint fixed in the lock, found on the shore of Newark Bay, near the site of a British encampment during the war of the Revolution.

ANNOUNCED PROGRAM

Mr. Charles G. Hine exhibited and discussed selections from a collection of about four hundred American and foreign war posters, representing appeals for recruiting, war loans, Red Cross, food conservation, etc.

Of special interest to Staten Islanders were David Varon's "Liberté," Alice J. Hendee's on food conservation, and Margaret Reeve's in connection with the appeal for books,—all representing the work of local artists.

Of local historical interest was one issued during the period of the Revolution, notifying Staten Island farmers that two thirds of their hay would be required by the king's troops.

The meeting then adjourned.

REGULAR MEETING, MARCH 16, 1918

The meeting was held in the assembly hall of the Museum, 154 Stuyvesant Place, Staten Island.

President Howard R. Bayne in the chair and thirty persons present.

The minutes of the meeting of February 16, 1918, were read and approved.

ANNOUNCED PROGRAM

Mr. Frank C. Kaye gave a description of the black fox breeding industry in the maritime provinces of Canada, illustrated by lantern slides, which was supplemented by an exhibition by Mr. J. B. Duffies, of silver, silver-gray, silver-black, and black fox pelts, with data in regard to their respective commercial values, ranging from about \$800 per pair for the first mentioned to about \$3500 for the pure black.

The meeting then adjourned.

REGULAR MEETING, APRIL 20, 1918

The meeting was held in the assembly hall of the Museum, 154 Stuyvesant Place, Staten Island.

President Howard R. Bayne in the chair with forty persons present.

The minutes of the meeting of March 16, 1918, were read and approved.

The president announced that the act amending the charter of the Association by changing the name to Staten Island Institute of Arts and Sciences had passed both branches of the State Legislature, was signed by the Governor on March 19, and is now Chapter 57 of the Laws of 1918.

ANNOUNCED PROGRAM

Captain Francis D. Murphy gave an address on Big Game Hunting in the Soudan, based upon personal experiences while stationed in the Nile region in the service of the British army.

The meeting then adjourned.

ANNUAL MEETING, MAY 18, 1918

The meeting was held in the assembly hall of the Museum, 154 Stuyvesant Place, Staten Island.

President Howard R. Bayne in the chair and thirty persons present.

The minutes of the meeting of April 20, 1918, were read and approved.

The president announced the death, on May 11, of Captain Francis Delancy Murphy, who succumbed to an attack of pneumonia after an illness of less than three days. Captain Murphy was a retired British army officer, fifty years of age, who served for sixteen years with General Kitchener in the Soudan. He was elected a member of the Association on January 22, 1916, and although only a recent resident of Staten Island, had taken an active interest in the protection of local bird life in connection with the work of the Staten Island Bird Club.

At the meeting of the Association on January 20, 1917, he described and discussed the African animals represented in the Frederick C. Have-meyer collection of mounted heads; at our meeting last month he entertained us with an account of his personal experiences in big game hunting in the Soudan; and this evening he was to have delivered an address on Observations of a Resident in Equatorial Africa.

The annual report of the Board of Trustees was read by the president in lieu of his annual address. (See this issue, p. 61.)

The annual report of the treasurer was read, approved and ordered placed on file. (See this issue, p. 63.)

The annual report of the secretary was read, approved and ordered placed on file. (See this issue, p. 64.)

The director gave an outline of the principal items to be included in his report which will be submitted to the Board of Trustees at its annual meeting. (See this issue, p. 65.)

The president announced the next order of business to be the election of four trustees for a term of three years each, to fill the vacancies caused by the expiration of the terms of office of Howard R. Bayne, William T. Davis, Charles A. Ingalls, and S. McKee Smith, and called for the report of the committee on nominations.

The committee submitted the names of the present incumbents to succeed themselves.

The president asked if there were any other nominations, and none being presented it was regularly moved and carried that the secretary be instructed to cast one affirmative ballot for the nominees submitted by the committee.

52 STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES

The secretary cast the ballot as instructed and the president declared the nominees elected.

The Britton Cottage committee submitted a report covering the period since the last annual meeting of the Association, which was read and ordered placed on file. (See this issue, p. 76.)

Verbal reports were given on the work of the active sections of the Association during the year, in the form of extracts from the minutes of the several meetings held. (For full reports of the Section of Historical Research and the Section of Natural Science see this issue, p. 52, and p. 57, respectively.)

Dr. Arthur Hollick submitted the following preamble and resolution, which was unanimously adopted:

WHEREAS, in accordance with Chapter 57 of the Laws of 1918, amending Chapter 850 of the Laws of 1911, Chapter 208 of the Laws of 1910, and Chapter 526 of the Laws of 1905 incorporating the Staten Island Association of Arts and Sciences, the name of the said association is changed to Staten Island Institute of Arts and Sciences,

Resolved, that this corporation at this annual meeting held on May 18, 1918, hereby formally adopts the said change of name and requests the Board of Trustees to take whatever further action may be necessary in such connection.

Mr. Charles W. Leng referred to Mr. Cleaves' address at the January meeting of the Association on ice phenomena during the past winter, and exhibited the roots of a cultivated honeysuckle vine, *Lonicera japonica* Thunb. ?, from his garden, which had been killed by the extreme cold that killed or damaged so many other cultivated plants.

Mr. William T. Davis mentioned the high-water shrub, *Iva frutescens* L., as a plant thermometer that recorded extremes of cold by the extent to which their stems were winter killed according to the degrees of temperature, and referred to his paper on the subject in the PROCEEDINGS OF THE NATURAL SCIENCE ASSOCIATION OF STATEN ISLAND, vol. 3, p. 44. June 10, 1893.

The meeting then adjourned.

MEETINGS OF THE SECTIONS

SECTION OF HISTORICAL RESEARCH

ANNUAL MEETING, JANUARY 12, 1918

The meeting was called to order by the chairman, George W. Tuttle.

Present: George W. Tuttle, William T. Davis, Edward M. Stothers, Stephen L. Mershon, and Arthur Hollick, members; Charles G. Hine and E. C. Shaver, visitors.

Dr. Arthur Hollick was elected recorder pro tempore.

Officers for the ensuing year were elected as follows: chairman, George W. Tuttle; recorder, S. McKee Smith.

The minutes of the meetings of January 13 and April 6, 1917, were read and approved.

Mr. Stephen L. Mershon exhibited and presented to the Association a tracing, tinted in water colors, of a map with the title:

Map
of
New York, & Staten Isl^{ds}
And Part of
Long Island
Surveyed by Order of His Excellency
General Sir Henry Clinton K. B.
Commander in Chief of His Excellency's
Forces
&ca. &ca. &ca.
1781

.
Surveyed and Drawn,

by George Taylor & And^y. Skinner.

Surveyors to His Excellency The Commander in Chief.

The map is 3 ft. 3 in. \times 2 ft. 2 in. in size. The scale is one inch to the mile. The case in which it was packed and mailed, sealed with the Crown seal, was presented with the map. Mr. Mershon stated that, so far as he was aware, this is the only official copy of the map ever made, having been obtained through application to the British government. It shows the location of the roads and every individual house in existence on Staten Island at the time when the survey was made, and all the important topographic features.

Doctor Hollick called attention to the apparent fact that what we know as "Burnt Island," at the mouth of Fresh Kill, was not at that time an island, being represented on the map by a peninsula-like extension of the salt meadow toward the north; also that the name "Smoaking Point" is given to a projecting area of land on the New Jersey shore of Staten Island Sound, a short distance to the north of and nearly opposite to the locality on the Staten Island shore which is now and has been for many years known under the same name.

Doctor Hollick submitted the following memoranda:

In the "Chart of the Entrance of Hudson's River, etc.," published in London in 1776 as an official pilot chart of the region, made from surveys by John Gascoigne and others, the New Jersey locality is designated "Smoaking Point" and the Staten Island locality "Johnson's Point." The

STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES

name "Smoaking Point," however, is applied to the Staten Island locality on a "Map of the Country Thirty Miles round the City of New York, etc.," by I. H. Eddy and others, published in New York in 1828 and, so far as I am aware, on all subsequent maps. On the map accompanying Mr. William T. Davis' "Staten Island Names, Ye Olde Names and Nick-names" (PROC. NAT. SCI. ASSOC. STATEN IS., vol. 5, No. 5, Special No. 21, Mar. 14, 1896) the name Smoking Point is applied to the Staten Island, and Tufft's Point to the New Jersey locality. The designation, "Johnson's Point" is not recorded by Mr. Davis either in his text or on the map.

Mr. George W. Tuttle remarked that the map shown by Mr. Mershon was not the only copy of the original in this country, although it is probably the only officially copied one. The Title Guarantee and Trust Co. possess photographic reproductions of the map, reduced in size; and in the Corporation Counsel's office there is a tracing of the map. It is generally regarded as of great value in fixing accurately the exact location of the old roads on Staten Island.

Dr. Arthur Hollick presented and discussed the following items:

1. A collection of twenty-nine old local instruments (indentures, agreements, deeds, bonds, quit claims, surveys, complaints, warrants of arrest, etc.) dating from the latter part of the seventeenth to the beginning of the nineteenth century, recently donated to the Association by Mr. Horatio J. Sharrett. Extracts from certain of the instruments were read by Doctor Hollick.

2. Three old pictures of Staten Island scenery, with the following comments:

Under date of April 2, 1917, I received from J. H. Seers, of 25 Abbott's Park Road, Leyton, England, a price list of engravings representing old views of New York and vicinity, which included three of Staten Island apparently not represented in our collection. As a result of subsequent correspondence, in a letter dated July 2, Mr. Seers agreed to dispose of the three views for \$5.00. I immediately wrote, requesting that he hold the pictures and that the money would be forthcoming as soon as possible. In the August issue of the BULLETIN an appeal was printed for a contribution of \$5.00 for this specific item, and Miss Bessie E. Davis generously responded. A money order was transmitted on September 1, and one week ago, on January 5, 1918, the pictures were received. They are finely executed steel engravings, delicately tinted in water colors, with the following titles and information:

[a]

The Narrows from Staten Island.

W. H. Bartlett

E. Finden

London. Published for the Proprietors, by Geo. Virtue, 26 Ivy Lane, 1837.

[b]

New York Bay.

(From the Telegraph Station.)

W. H. Bartlett

R. Wallis

London: Published for the Proprietors, by Geo. Virtue, 26 Ivy Lane, 1838.

[c]

The Narrows.

(From Fort Hamilton.)

W. H. Bartlett

R. Wallis

London. Published for the Proprietors, by Geo. Virtue, 26 Ivy Lane, 1838.

In connection with these pictures the following facts are of interest:

[a] was evidently made from the same plate, slightly altered, as that from which was made a similar engraving in our collection, which bears the same title but no date or place of publication and on which "Engraved by J. White" takes the place of "E. Finden" below the right-hand end of the lower border. Apparently the picture recently acquired is the original and the other one a subsequent reprint from the altered plate.

In the assumed original engraving it may be seen that all of the shipping consists of sailing vessels, whereas in the other there are several steam craft. Certain of the human figures and trees are also changed, but otherwise the two pictures are identical.

On the assumed reprint there is a pencil memorandum, "'American Scenery' (1854?)," which may be intended to designate the title of the publication from which it was abstracted and the approximate date of issue.

In our collection we also have practically the same picture in a woodcut taken from Gleason's Pictorial Drawing Room Companion, published in Boston in 1853.

[b] was evidently made from the same plate as was one in our collection which is without title, date of publication, or any other data.

[c] was evidently made from the same plate as was another in our collection with the title "Fort Hamilton and the Narrows" and with the name "F. O. Freeman" in place of "R. Wallis" below the right-hand end of the lower border. It seems reasonable to assume that in this instance also we have an original engraving and a subsequent reprint.

In the assumed original only sailing vessels are depicted, whereas in the other, one of these vessels is replaced by a steamship, and a flock of sheep and figures of civilians are replaced by soldiers. It may also be seen that in the first the flag on the fort is represented at half mast, in the other at full mast.

3. Bound volume of the Richmond County Mirror, vol. 1, July 1837-July 1838, edited by Francis L. Hagadorn, and recently purchased for the Association from his grandson Francis C. Hagadorn, for \$5.00, through

the joint contribution of \$2.50 each from L. W. Freeman and Arthur Hollick. This was the first newspaper actually printed on Staten Island. It was made up on the imposing stone now in our collection of local antiquities, exhibited and described by Ira K. Morris at the meeting of the Association October 18, 1913. (See PROC. STATEN IS. ASSOC. ARTS AND SCI. 5: 1-7. Oct. 1913-May 1914.)

Of special interest is the frontispiece to the volume, a steel engraving with the legend "New Brighton; from New York Bay. Engraved & Published for the New Brighton Mirror. Painted by Chapman. Eng^d by Rolph." A copy of this engraving, with the title "New Brighton in the Vicinity of New York," but without any indication of its place of publication, was secured some time ago and included in our collection of old local views. It was evidently a reprint from the same plate as that from which this frontispiece was made.

Mr. George W. Tuttle read the following papers:

- (a) Old Court Records of Richmond County, by Edward C. Delavan, Jr. (See this issue, p. 22.)
- (b) Comments on the old French map of Staten Island in the vicinity of Great Kill, included in Land Papers, Volume 1, page 99, in the Secretary of State's Office, Albany, N. Y.¹
- (c) The Location of the Old Village of Dover on Staten Island, with photo-reproduction of a map in the Library of Congress (date 1676?) supposed to be the oldest map of Staten Island on which Dover is indicated.

On motion the Section adjourned to meet on Saturday, February 23.

ARTHUR HOLLICK,

Recorder pro tempore.

SATURDAY, FEBRUARY 23, 1918

The Section met on the above date, chairman George W. Tuttle presiding.

Present: George W. Tuttle, Edward C. Delavan, Jr., Arthur Hollick, Stephen L. Mershon, S. McKee Smith. Mr. and Mrs. F. P. Danzilio, and Mr. and Mrs. Charles D. Durkee were present as visitors.

The minutes of the annual meeting of January 12, 1918, were read and approved.

Dr. Arthur Hollick presented the following communication:

Some years ago I had occasion to deliver an address on Some Celebrities Who Have Lived on Staten Island. In the course of my remarks I referred to the fact that very few authors had utilized Staten Island's natural

¹ Shown at the meeting of the Association November 17, 1917, and described in a memorandum by Dr. James Sullivan, State Historian and Director of the Division of Archives and History, State Department of Education, University of the State of New York.

features, or social conditions, or local characters in works of fiction, and incidentally mentioned James Fenimore Cooper as one of the few, in connection with his romance "The Water Witch." Mrs. Andrew J. Newbury happened to be one of my audience and subsequently very kindly sent me this interesting letter:

"Cooper's account of his chum for months on the *Sterling* is given in his book 'Ned Myers.' The life of this shipmate, Ned Myers, was written in 1843, when the old salt, then a battered hulk, was an inmate of Sailors Snug Harbor.

"When Cooper was on the crest of the wave of his literary fame the old sailor, wondering if this could be the comrade of his youth, wrote after twenty-five years of separation to inquire. The answer was 'I am your old shipmate'; and Ned was invited to visit Cooper's home, 'Otsego Hall.'

"Many people noted this pair in 1843. Hardly a day passed that they were not seen together, as the heavy hall gates swung open at eleven o'clock, coming out for a morning walk or a sail on the lake,—Cooper's portly form and, by his side, a shriveled figure with halting step, leaning heavily on a crooked stick which served for a cane. It was during this visit that the old sailor spun his life yarn in his own way and Cooper wove it into his book 'Ned Myers.'

"The *Sterling*, named for *Sterling Castle*, sailed from Maine in 1806 for Cowes, England. Cooper learned much of London in his stay there, and went thence to Gibraltar. Seamen of English birth were impressed from the vessel for the war against Napoleon. The ship was chased by a pirate in the Bay of Biscay. Once, in a heavy sea, they were almost wrecked, but finally got back to Philadelphia, in 1807."

Mr. Stephen L. Mershon exhibited and discussed the British military map of New York, Staten Island, and part of Long Island, made in 1781, presented at the preceding meeting of the Section; also a blueprint copy of a map of Staten Island showing the location and boundaries of all the Crown grants of land on the island, from 1668-1712, prepared under the direction of the State Engineer and Surveyor, dated 1907, and a list of the grants, with official data, from the original one down, including a history of quit rents. Discussion in regard to the accuracy of certain details of the map and accompanying data was participated in by Messrs. Mershon, Delavan, and Tuttle.

S. McKEE SMITH,
Recorder.

SECTION OF NATURAL SCIENCE

The Section held one meeting, as follows:

ANNUAL MEETING, APRIL 13, 1918

In the absence of the chairman Mr. William T. Davis was elected chairman pro tem.

The minutes of the annual meeting of April 14, 1917, were read and approved.

The following officers were elected for the ensuing year: chairman, Charles W. Leng; recorder, Howard H. Cleaves.

The following items were presented and discussed:

By Dr. Arthur Hollick—(1) A paper on *Quercus heterophylla* in the Clove Valley (see this issue, p. 32) illustrated with photographs and herbarium specimens of leaves.

(2) Herbarium specimens from the filled-in area in the vicinity of Arlington station on the North Shore branch of the Staten Island Rapid Transit Railroad, with the following notes:

Previous articles on the flora of this locality are Recently Introduced Grasses and Sedges (PROC. STATEN IS. ASSOC. ARTS AND SCI. 2⁴: 189) and Notes on Introduced Plants Collected near Arlington, Staten Island (Ibid. 3²: 62).

On September 12, 1917, this interesting area was again explored and two additions to our local flora were collected, viz., *Anoda triangularis* (Willd.) D.C., a native of Mexico, and *Melochia corchorifolia* L., a native of tropical regions. It is hardly to be expected that these species will persist as permanent residents, although it is interesting to note that specimens of *Sesamum indicum* L., also a tropical species, were collected there in 1910 and again in 1917; but, of course, we do not know that the 1917 plants were the direct descendants of those of 1910. They may have been introduced *de novo* subsequently.

Among specimens collected in 1908 and only recently identified are several of the genus *Atriplex*, one of which proves to be *A. laciniata* L., a species not previously recorded from Staten Island.

(3) An albino specimen of purple gerardia, *Agalinis purpurea* (L.) Britton, collected at New Dorp, Sept. 15, 1917, by Mr. Harold K. Decker. In Britton and Brown's Illustrated Flora this species is described as "rarely white."

(4) A typical specimen of a glaciated stone, a limestone cobble, from the boulder till excavated for the site of the new museum building at the corner of Stuyvesant Place and Wall street, Saint George.

By Mr. Wm. T. Davis—(1) Observations on herring gulls at the new Silver Lake reservoir, as follows:

Early in November, 1917, herring gulls, *Larus argentatus* Pont., began to visit the Silver Lake reservoir. On the afternoon of November 18 sixteen gulls were counted in the reservoir; on the 22d one hundred and thirty-eight, and on the 29th one hundred and five. The birds appeared in the afternoons, the first of them usually about two or three o'clock, on their way across Staten Island from Newark Bay and the Sound to their roosting places by the sea. On the date last mentioned it was a bright sunny day, and the gulls often rose from the reservoir to fly about in circles and then alight on the surface of the water again. In fact they were indulging in much fancy flying. On this as well as on previous occasions the birds resting on the surface of the water would duck under and then flop their wings while rising partly out of it; in fact were taking a bath in the fresh water. This is their well known habit in other reservoirs that they frequent, such as the one in Central Park, New York City.

RECORDS OF MEETINGS

On December 2 only seven gulls were observed in the reservoir, one of them, however, was in the Logan Spring or northeastern basin, the only gull thus far observed there. On December 16 the reservoir was completely frozen over and no gulls came down to the ice.

(2) Local entomological specimens with explanatory notes, as follows:

Carabus nemoralis Mull. Three individuals of this large and predaceous beetle, recently introduced about New York City (see PROC. STATEN IS. ASSOC. ARTS AND SCI. 5: 92) were collected on Henderson Ave., West New Brighton, April 3, 1918. They had been tempted from their winter retreats by the very warm weather of that period.

Ladon exusta Say. A female of this dragonfly, which had evidently been on the wing some time, was collected in the Clove Valley July 5, 1917. This species is an addition to our local list but is common in northern New Jersey. In the pine barrens of New Jersey and on parts of Long Island its place is taken by *Ladon exusta deplanata* Rambur.

Partenodera cinensis (Saussure). This large, introduced species of mantis has been mentioned in our PROCEEDINGS (vol. 8, p. 43, Nov. 8, 1902) as having been reared on Staten Island from egg masses received from Philadelphia. It now appears to have established itself at Mariner Harbor, two having been collected there in 1916, and three in 1917. These records in detail may be found in a paper on the Introduction of Palearctic Praying Mantids into the North Atlantic States, to be published in the Bulletin of the Brooklyn Entomological Society.

(3) Local zoological specimens preserved in alcohol, with accompanying data, as follows:

Spelerpes ruber (Daudin). Red salamander. Found in a rather dry situation under a piece of wood at foot of tree in woods and about 100 feet from water. Reed's valley, Dongan Hills, August 17, 1917.

Storeria dekayi (Holbrook). Brown snake. Found dead on DeKalb St., Saint George, April 23, 1917, following the warm weather of the 22d. Also one found dead on steps leading to Castleton Park grounds, Richmond Terrace, New Brighton, September 16, 1917.

Diadophis punctatus (Linnaeus). Ring-necked snake. Found dead on steps leading to the Moravian Cemetery, New Dorp, September 20, 1917.

Thamnophis sirtalis (Linnaeus) Garter snake. Killed at 146 Stuyvesant Place, New Brighton, by a neighbor who saw it crawling in the garden, on the very warm day of April 22, 1917.

By Mr. Edward J. Burns—Note on the capture of a field mouse by a gray squirrel, as follows:

Near my home at Fort Wadsworth, Staten Island, on September 2, 1917, while taking a walk along a path bordered by trees and underbrush on one side and an old board fence on the other, in search of insects, my attention was attracted by the squeaking of a mouse in the bushes just ahead of me. Not knowing what was happening I stood still, and presently saw a gray squirrel, *Sciurus carolinensis leucotis* (Sapper), less than

ten feet away, carrying what was evidently a full-grown field mouse in its mouth. All this time the mouse was struggling and squeaking.

The squirrel climbed the fence, sat on the top rail, and readjusted the victim with its paws in the way they usually handle apples or large nuts, and at the same time apparently biting the mouse, which squeaked the louder.

As I watched, the squirrel jumped to the branch of an overhanging tree and ran off out of sight in the maze of treetops, the squeaking of the mouse becoming fainter and fainter and finally lost to my hearing.

By Mr. Howard H. Cleaves—A living, but at the time dormant, specimen of jumping mouse, *Zapus hudsonius* Zimmerman. This had been unearthed from its winter quarters, two feet beneath the surface of the ground, near Huguenot avenue, Huguenot Park, about the middle of March.

During its period of about a month of captivity it had changed two or three times from a torpid to an active condition and vice versa, by being alternately subjected to warmth and cold. A tall glass jar served as a place of confinement. In the past two or three days this had been in a room where the temperature, between 60° and 70° F., was such as to keep the animal active, and several times it was observed eating bits of noodles and lettuce. Mr. Wm. T. Davis, who had it under observation during this period of wakefulness, noted several things of interest. One of these was the remarkable ability of the mouse to negotiate a perpendicular leap against the side of the jar, sometimes reaching a considerable height, the leap being repeated dozens of times in rapid succession. It was not disturbed by the proximity of human faces only a few inches outside the glass dwelling, and was observed several times, making its toilet under such circumstances, wetting its forepaws and rubbing them vigorously over its head and face.

HOWARD H. CLEAVES,
Recorder.

Annual Reports

REPORT OF THE BOARD OF TRUSTEES

The Board has held five stated meetings on the following dates: May 26, October 6, December 1, 1917; February 9, April 6, 1918; five special meetings on the following dates: June 30, July 17, September 28, October 24, 1917; January 17, 1918; and two adjourned meetings on June 9, 1917, and May 2, 1918. The unusual number of adjourned and special meetings was due to the business connected with the new building and the necessity of replacing some of the employees who had resigned.

The building committee, consisting of Mr. James R. Walsh, chairman, and Messrs. Wm. T. Davis and Anton W. Hoffmeyer; and the finance committee, consisting of Dr. John Q. Adams, chairman, Mr. William G. Willcox, Mr. Chas. A. Ingalls, and Dr. N. L. Britton, also held many formal and informal meetings.

The women's auxiliary committee took charge of the informal reception following the regular meetings of the Association, as in former years. Mrs. Hollick having resigned as a member and as chairman of this committee, the president appointed, on January 17, Mrs. Emily Sears as her successor.

The program committee arranged for lectures at the regular meetings by the following gentlemen: Mr. Arthur A. Michell, Mr. Frank C. Kaye, Mr. Howard H. Cleaves, Capt. Francis D. Murphy, and Dr. James Sullivan.

The Board tenders its thanks to all the ladies and gentlemen who by their committee work and lectures have aided to make the work of the Institute successful.

At the annual meeting of the Board on May 26, 1917, the following officers were elected: president, Hon. Howard R. Bayne; first vice-president, Wm. T. Davis; second vice-president, Wm. H. Mitchill; treasurer, Chas. A. Ingalls; secretary, Chas. W. Leng.

The only change in the personnel of the Board was the substitution of Dr. Thomas O. Baker for Mr. James J. Reynolds, caused by Dr. Baker's having succeeded Mr. Reynolds as District Superintendent of Schools, becoming thereby ex officio a member of the Board.

The following persons were elected by the Board to active membership in the Institute during the year: Dr. James B. Pentz, Dr. Robert H. Pentz, Mrs. Frank Smith, Miss Mary Wood Daley, Mr. Ernest L. Baldwin, Mr. Louis A. Pape, Mr. George Schrieb, Mr. Chas. E. Fannon, Dr. Lucius P. Brown, and Martin R. Porter.

The Board records with regret the deaths of the following members: W. W. Bryan, James W. Clawson, T. R. J. Lins, Capt. Francis D. Murphy, Chas. Rosenberg, Henry A. Tabb, and of Louis P. Gratacap, a former president.

The lease of the building heretofore occupied as a museum expired on March 31, 1918, and was renewed from month to month until the new museum building should be ready. The corner stake for the initial excavation for the new building was driven by Wm. T. Davis on May 22; ground was broken by the president May 31 as illustrated in the Staten Islander; the contract for the erection of the new building was authorized at the meeting of the Board held July 17, and was signed by the president and the secretary on July 26. The cornerstone was laid October 20 by the president in the presence of a number of the trustees and members and friends of the Institute. Addresses were made by Hon. George Cromwell, Dr. N. L. Britton, Mr. William G. Willcox, Dr. Arthur Hollick, and others. The comptroller of the City of New York was also present and made an address. The building is now in a forward state of completion and the Board hopes to welcome the members of the Institute within its walls at an early date.

In connection with the cost and construction of the new building the Board takes this opportunity of recognizing the generosity of the 124 subscribers to the building fund, whose names appear on page 85, and the faithful services of the architect, Mr. Robt. W. Gardner, and the builders, The John Milnes Co., both having been contributors to the fund, and having given, besides, most diligent attention to the work of construction.

The activities of the Institute and the interest of the public therein have multiplied during the past year. The total attendance during the calendar year 1916 was 15,736; the total attendance during the calendar year 1917 was 19,869 and would almost certainly have passed the 20,000 mark except for the unusual weather conditions. In addition to the regular meetings of the Association and the meetings of the two active sections as shown by their individual reports, the feature of children's lectures was continued under the direction of Mr. Cleaves until the end of 1917. Several other matters have become part of the year's history, among which may be specially mentioned the assignment of quarters in the museum building for the use of the local exemption board and the special exhibit prepared by the director in connection with the Catskill Aqueduct Celebration.

The matter of increased activity in furthering war work has been referred to the director and Miss Pollard.

An exhibit of articles made by prisoners of war has already been installed by Miss Pollard.

The publication of the PROCEEDINGS has been continued under the editorial care of Dr. Philip Dowell, Dr. Arthur Hollick, and Mr. Wm. T. Davis.

The Britton Cottage committee will make a separate report. Their management of the premises with the aid of the D. A. R. has been most successful.

Submitted, for the Board of Trustees,

CHAS. W. LENG,
Secretary.

REPORT OF THE TREASURER

MAY 18, 1918

INCOME

Balance on hand last report.....	\$16,002.87
Since received from dues	\$ 652.00
Since received from sale of PROCEEDINGS	11.70
Since received from N. Y. City on account of postage.....	20.00
Since received from donations to museum fund.....	66.50
Since received from interest on life membership fund.....	33.61
Since received from life membership	50.00
Since received for account Britton Cottage.....	104.48
Since received from subscriptions to building fund....	5,115.00
Since received from interest on building fund.....	305.69
Since received from subscriptions to H. H. Cleaves salary fund	589.00
	<u>\$ 6,947.98</u>
	<u>\$22,950.85</u>

DISBURSEMENTS

Paid for printing PROCEEDINGS	\$ 170.81
Paid for sundry expenses	334.79
Paid for sundry items out of museum fund.....	61.50
Paid for sundry items out of library fund.....	42.90
Paid for Britton Cottage account	105.40
Paid for H. H. Cleaves salary account	589.00
Paid for account new museum building.....	18,829.83
	<u>\$20,134.23</u>
Balance on hand	<u>\$ 2,816.62</u>

Deposit in Corn Exchange Bank	\$ 1,189.75
Deposit in S. I. Savings Bank	<u>1,626.87</u>
Total	<u>\$ 2,816.62</u>

Divided as follows:

Building fund	\$ 1,625.86
Museum and library fund	10.15
Life membership fund	898.97
General fund	\$333.80
Less deficit Britton Cottage.....	52.16
	<u>281.64</u>
	<u>\$ 2,816.62</u>

Respectfully submitted,

C. A. INGALLS,
Treasurer.

64 STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES

MAY 25, 1918

INCOME

Balance last report	\$ 1,867.66
Received from dues	\$ 5.00
Received from subscriptions	1,010.00
Received from sale of PROCEEDINGS	3.50
	<u>1,019.50</u>
	\$ 2,887.16

DISBURSEMENTS

Paid for sundry expenses	\$ 37.62
Paid for subscriptions	4.00
Paid for account Britton Cottage	8.02
Paid for binding PROCEEDINGS	20.90
	<u>70.54</u>
	\$ 2,816.62

C. A. INGALLS,
Treasurer.

REPORT OF THE SECRETARY

The Institute held eight regular meetings, including the annual meeting, and a special meeting at the laying of the cornerstone of the new museum building. The average attendance was 30 at each regular meeting and over 50 were present at the cornerstone ceremony.

The membership records are as follows:

On roll at date of last annual report	296
Since elected	8
Resigned	15
Deceased	<u>7</u>
Leaving on roll at date	282

These are divided as follows:

Active members (excluding those not qualified)	251
Life members	11
Corresponding members	4
Honorary members	2
Ex officio members	2
Patrons	<u>12</u>
Total membership	282

CHAS. W. LENG,
Secretary.

REPORT OF THE DIRECTOR

TO THE BOARD OF TRUSTEES,

STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES.

Sirs: I have the honor to report as follows upon the administration and activities of the museum for the fiscal year ending May 18, 1918, to which is appended statistical data in connection with the same compiled by Miss Agnes L. Pollard, curator:

CITY APPROPRIATION

The appropriation requested for the maintenance of the museum for the year 1918 was \$9,327.56.

On August 25, 1917, a hearing was had before the subcommittee of the budget committee of the Board of Estimate and Apportionment, at which Dr. John Q. Adams, Miss Agnes L. Pollard, curator, and the director were present.

The subcommittee declined to approve the restoration of the positions of one curator and one museum guard eliminated last year, or to recommend the increase of \$200 per annum requested in connection with the salary of Miss Pollard; and minor cuts were recommended in the estimates for general expenses.

The director gave formal notice of appeal to the full budget committee.

In response to the appeal a hearing was had before the committee on October 2, at which Doctor Adams, Borough President Calvin D. Van-Name, and the director were present, and the several items requested in the salary and general expense accounts were explained and discussed.

The tentative budget appropriation for the Museum subsequently approved by the Board of Estimate and Apportionment was:

Code No.	Title	Amount
1445	Salaries, Regular Employees:	
	Curator in chief [Director]	\$2,500.00
	Curator	1,200.00
	Janitor	840.00
	Watchman	600.00
	Museum guard	480.00
	Total, personal service	\$5,620.00
1446	Expenses	1,265.00
	Departmental total	\$6,885.00

The positions eliminated last year were not restored; but the requested increase of \$200 in the salary of our curator was allowed. The sum of \$762.56 was cut from our requested expense account, but inasmuch as \$750 of this amount represents six months' rent of our present quarters the actual cut amounts to only \$12.56. It was assumed that we would be in our new building by or before the middle of next year, and that it was only necessary to provide for six months' rent.

Nothing further developed at subsequent hearings and the budget as finally adopted was identical with the tentative budget, so far as our appropriation was concerned.¹

MUSEUM STAFF AND EMPLOYEES

Alexander Forsyth, janitor, resigned his position in July, 1917, and Samuel Craig was appointed in his place. Craig resigned in October and Michael Ward was appointed in his place. Francis Forsyth, museum guard, resigned his position in December and Daniel Cary was appointed in his place. All of these employees resigned in order to accept better paying positions in connection with war industries. Cary resigned in April, 1918, in order to enlist in the U. S. Naval Reserve Force, thus earning a service star for the Museum, and Edward J. Burns was appointed in his place.

Mr. Howard H. Cleaves continued his services as curator up to the end of the year 1917 although the fund raised by subscription for the payment of his salary was exhausted by the end of September, and for the following three months he gave his services gratuitously.

The November and December schedules of lectures for school children were arranged by him and every detail necessary for their success received his personal attention and care. He also arranged an interesting exhibit of various kinds of birdhouses and examples of food supplies for the winter feeding of birds, and performed considerable expert curatorial work for the Museum.

It may be recalled that in December, 1916, the director, as secretary of the Association, asked the Association for authority to issue an appeal for subscriptions to a fund for the payment of Mr. Cleaves' salary, at least for a portion of the year 1917, the city having declined to make any appropriation for the purpose. The authority was given, the appeal issued, and \$989 raised in sums ranging from \$2 to \$100. The list of subscribers to this fund is as follows: Mrs. John F. Archbold, Samuel P. Avery, William L. Bailey, Mrs. Charles P. Benedict, Samuel R. Brick, Edward C. Bridgman, Nathaniel L. Britton, Edward W. Brown, Elmer Butler, Daniel Campbell, James W. Clawson, Maunsell S. Crosby, Miss Bessie E. Davis, Mrs. Elizabeth Davis, William T. Davis, Dr. Louis A. Dreyfus, Mrs. Louis A. Dreyfus, Mrs. Helen Finch, Miss Ruth B. Fisher, Henry J. Fuller, Oliver P. Geoffroy, Abel J. Grout, Daniel S. Hage, John D. Hage, Mrs. Henry W. Hardon, Paul Heine, Anton W. Hoffmeyer, Mrs. Anton W. Hoffmeyer, Dr. Arthur Hollick, Mrs. Anna M. King, Mrs. Wilhelm Knauth, Mrs. Ethel L. Kraft, Russell H. Loines, William H. Mitchell, Capt. Francis D. Murphy, Mrs. Andrew J. Newbury, Miss Helen M. Oakley, Miss Agnes L. Pollard, Mrs. Susan I. Porter, Baldwin S. Prentiss, John Rader, Anton L. Schwab, William I. Seaman, C. Sidney Shepard, Alanson Skinner, Mrs. Edmund A. Stirn, Mrs. Louis A. Stirn, George W. Tuttle, Frank J. E. Weatherdon, William Y. Wemple, William P.

¹ See City Record, Nov. 13, 1917, p. 7535.

Wharton, F. Winthrop White, William G. Willcox, Mrs. William G. Willcox, Miss Annie F. Wood.

In connection with this list it is of interest to record that thirty-eight members of the Association contributed \$635; eight members of the Bird Club contributed \$84; and that nine persons who were not members of either organization contributed \$270.

The city having declined to approve any appropriation for the position during the year 1918, and no effort having been made to raise any funds for the purpose by popular subscription or personal appeal, as was done last year, we were deprived of his official services after December 31, 1917.

During several years past the director realized more and more the advisability of divorcing the institutional activities of the Museum from the ordinary activities of the Association, and hence, at the annual meeting of the Board on May 26, 1917, he tendered his resignation as secretary of the Association, after almost thirty-six years of continuous service. This has relieved the director of a great deal of work and responsibility and has enabled him to give more largely of his time, thought, and energies to the administration and development of the Museum. For the courtesies tendered by the Board in connection with the event the director takes this opportunity to acknowledge his sincere appreciation.

MUSEUM ATTENDANCE

The number of visitors to the Museum from May 1, 1917, to April 30, 1918, inclusive, was 15,976. This is lower by 1,385 than the attendance of the preceding year. This loss, however, may probably be accounted for by reason of the severe cold weather in December and January; the closing of the Museum from February 7 to 13 inclusive; and the abandonment of the children's lecture courses during January, February, and March, due to the loss of Mr. Cleaves' services as well as to the cold weather.

Detailed statistics may be found in the appended report of Miss Agnes L. Pollard, curator.

CHILDREN'S LECTURES

The first of the season's courses of Friday afternoon lectures for children was given on November 2 and the last one on December 28—nine in all, with an average attendance of 106 for each. On three occasions the lecture was repeated in order to accommodate the children who could not be seated the first time.

Detailed statistics may be found in the appended report by Miss Pollard.

The unavoidable abandonment of the lecture courses after the end of the year 1917 was deeply regretted by everyone concerned, and it can hardly be regarded in any other light than that of a public calamity. For many weeks children continued to come to the Museum on Fridays, expecting or hoping that the lectures would be resumed.

To the several lecturers and others who generously contributed their

time and services the director takes this opportunity to tender his sincere thanks and appreciation.

MUSEUM AND LIBRARY ACCESSIONS

Accessions to the museum and library by gift, exchange, purchase and collection were about as extensive and fully as varied and interesting as in previous years. More than a thousand items were added to our possessions and, while those that may be classified under the natural sciences show a decrease in numbers as compared with last year, those that relate to archeology, antiquities, and historical relics show an increase. A few of the specimens of special interest were placed on exhibition; certain others were mentioned in the BULLETIN from time to time; and others were shown and described at meetings of the Association and the sections; but most of them were, perforce, packed at once and stored for future utilization.

Lack of available time and opportunity for prosecuting any considerable amount of field work during the past year is largely accountable for the decrease in the number of natural science items.

Detailed statistics are included in the accompanying appendix, together with a list of the donors of material and a list of the institutions from which publications have been received in exchange during the year. Such exchanges are not included in the list of accessions.

From time to time, through the medium of the BULLETIN, the director has issued an appeal for some specific item, and seldom without securing what was desired. All of these were mentioned and acknowledged in the BULLETIN; but a special record should be made of the gift by Mrs. Elizabeth Davis of a 28-foot flagpole and a 5×8-foot flag, which was raised for the first time on Columbus Day, October 12, 1917.

From a friend who prefers that his name be not mentioned the director has also been assured of funds to any reasonable amount, to be expended at his discretion in connection with the new museum building for any purpose that may tend to economize time and labor, promote efficiency, and produce desired results.

FIELDWORK IN CONNECTION WITH OTHER ORGANIZATIONS

The director has enjoyed the privilege of acting as guide on several occasions to parties and individuals visiting Staten Island for scientific purposes. In connection with the Torrey Botanical Club, excursions were made to Richmond Valley and Kreischerville on June 16; to Pleasant Plains and Prince's Bay on August 4; and to Great Kill on August 11, in connection with the annual celebration of "Salt Water Day." On July 7, sixteen members and friends of the New York Mineralogical Club visited the Museum and inspected our collections, and afterwards made a trip to the Todt Hill iron ore localities. On June 11 Mr. Norman Taylor of the Brooklyn Botanic Garden was guided to Todt Hill for the special purpose

of collecting flowering specimens of *Viorna ochroleuca*, the rare, erect clematis. On September 11, 12, and 13, Mr. Alexander Gershoy of the New York State College of Agriculture was shown certain of the most interesting botanical localities on the island, for the purpose of assisting him in collecting specimens for the college herbarium.

SPECIAL EXHIBITS

One of the most instructive exhibits ever arranged in the Museum was installed in October in cooperation with the Mayor's Aqueduct Celebration Committee. It remained on exhibition for about eight weeks and was highly commended by the chairman of the committee. An edition of 300 copies of the catalog of exhibits was printed as a four-page leaflet, on request of the committee, so as to conform in size and style with catalogs of other similar exhibits arranged elsewhere.

Early in April an interesting war exhibit was installed, consisting of articles made by wounded Italian soldiers in the American Hospital at Florence, Italy. The articles were loaned by Miss Annie D. Hanks, who for a period of about two years was a volunteer aid in the hospital. This exhibit remained on display until the closing of the Museum.

THE COLD WINTER AND THE SHORTAGE OF FUEL

During the phenomenally cold weather of the latter part of December, 1917, and the early part of January, 1918, the museum activities were reduced to a minimum and only the most necessary routine work was attempted. Many of the pipes froze and the fire buckets in the main hallway and assembly room froze solid and had to be thawed out each morning.

About the middle of January our local coal supply was exhausted and we were informed that a limited amount could be obtained provided we send for it. Mr. Mark Milnes happened to be at the new museum building and he kindly drove his motor truck to the yard and brought back the coal.

Continuing through February the fuel situation was such that the Museum could only be kept open on a day-to-day basis, dependent upon small amounts of coal that could be obtained from time to time. On February 4 the last shovelful of coal in the cellar was used up; no more could be obtained; and on Wednesday, February 6, for the first time in its history, the Museum was obliged to close its doors to the public and did not reopen until Thursday, February 14, a quarter of a ton of coal having been secured the day before by hiring a horse and cart and getting it ourselves. On the morning of Saturday the 16th we were again without coal but during the afternoon Mr. Cleaves arrived in an automobile with a quarter of a ton brought all the way from Prince's Bay. The last of this lot was used up on Tuesday the 19th, and from then until Saturday the 22d, when we secured the delivery of half a ton, there was no fire in the furnace. The Museum was kept open, however, although very little work could be accomplished other than that of sorting and packing speci-

mens, books, and equipment in anticipation of moving. On Tuesday the 26th the half ton was exhausted, and on the 27th and 28th we were again without any heat. After that, however, we were able to obtain a normal supply. During a large part of this trying time the headquarters of the museum staff were in the kitchen, where a fire was kept going by means of wood and cinders. At no time was any member of the museum staff absent from duty.

WAR CONDITIONS AND ACTIVITIES

The Museum, in common with other institutions and industries, has not been exempt from certain effects imposed by war conditions. Economy of resources has had to be practised in every feasible direction and many things that formerly were regarded more or less as waste material have been utilized to the fullest possible extent.

Ordinary supplies have been difficult to obtain at times. Even common manila envelopes could not be obtained when needed and the mailing of the February BULLETIN was interfered with in consequence.

In connection with the Mayor's Second Red Cross War Fund Industrial Campaign Committee the members of the museum staff organized on a 100 per cent. basis, every member contributing to the fund and thus earning the full quota placard for the Museum. Miss Pollard has also been appointed an authorized agent for the sale of thrift stamps.

All available wall space has been given up to Liberty Loan, Food Administration, and other war posters; and the use of the assembly hall was granted for war service work in the preparation of posters; and for a period of ten days in July the local exemption board of the first district met in the main hall of the Museum.

As previously mentioned, a loan of articles made by wounded Italian soldiers was installed.

PREPARATIONS FOR MOVING

On May 31, 1917, ground was officially broken for the new museum building; on October 20 the cornerstone was laid; and at date the new building is practically completed and ready for occupancy.

Throughout the year all the available time of the museum staff was employed in sorting, arranging and packing such of the specimens, books, and equipment as were not on display or were not required for administration purposes. Floor plans were drawn to scale, all cases and other equipment were accurately measured, and the location of each in the new building was determined and marked on the plans, so as to obviate confusion when the furnishings were to be transferred.

The lease of our present quarters expires May 31 and hence the move must be completed by or before that date. On Saturday May 18, at 5 p.m., the Museum was closed to the public and the final work of packing now under way was begun. A contract has been made with C. H. Brown to move the entire contents of the Museum and Annex during the last week of the present month for \$150.

The contents of the Annex constitute a serious problem. A large part of this material must necessarily remain in storage and there is no available place for it in the new building except in the basement, which is designed for an auditorium. It may be recalled that last September the stone retaining wall on the property of Mr. F. Ducasse on the west side of the Annex collapsed during a heavy rainstorm and broke through the side wall of the Annex, throwing the shelving with all its contents on the floor. This material consisted in part of the overflow of the MacDonald collection of pottery and in part of the Sanderson Smith library. Much of the pottery was broken, and the books, pamphlets, and papers were buried under dirt and miscellaneous debris. The books, etc., were roughly cleaned and carried up into the loft, where they would have a chance to dry out, and the rubbish was cleared away. Subsequently Mr. Ducasse had the damage repaired; but during the cold snap last winter a service pipe on his premises froze and broke; the floor of the Annex was flooded, and for weeks there was ice to a depth of several inches covering the floor. When this melted the place was saturated and further destruction resulted. Storage cases were warped and swelled, specimen trays were disintegrated and labels were made indistinguishable. Much of this material not completely ruined is rendered useless for museum purposes by mixture and loss of labels. Many specimens of undoubted value are of no use for this reason. The services of an expert librarian will be required to sort and catalog the library and render it available for use. The time and assistance necessary to sort this material is not now available, however, and hence it will be necessary to move everything—much of it probably of no value—and trust to means being provided in the future for its proper examination and disposition.

THE AMERICAN ASSOCIATION OF MUSEUMS

During the latter part of May, 1917, the annual convention of the American Association of Museums met in New York, and on the afternoon of Saturday the 25th the members of the museum staff enjoyed the privilege of entertaining a delegation of the visiting members at the Museum. The features of the occasion were an informal reception and inspection of the Museum, followed by a trip in automobiles to the Britton Cottage (see BULLETIN, June 1917).

The advisability of our Association joining the American Association of Museums as a sustaining member, in order that we might have a voice and a vote in the museum interests and affairs of the country has been mentioned on several occasions and was specially urged in the director's report to the Board on April 6. It is to be hoped that steps may be taken to assure our membership at the forthcoming convention on May 20-22, at Springfield, Mass.

Respectfully submitted,

ARTHUR HOLLICK,
Director.

APPENDIX

BY AGNES L. POLLARD, *Curator*

MUSEUM ATTENDANCE FOR THE FISCAL YEAR 1917-18

Month	Open days	Number of visitors	Daily averages
May, 1917	27	2,030	75 +
June	26	1,495	57 +
July	26	2,140	82 +
August	27	1,095	40 +
September	25	1,331	50 +
October	27	1,514	56 +
November	26	2,130	81 +
December	26	939	36 +
January, 1918	27	904	34 +
February	18 ¹	487 ¹	26 +
March	26	1,088	41 +
April	<u>26</u>	<u>823</u>	<u>31 +</u>
Total 307		Total 15,976	Daily av. for yr. 52 +

Highest daily attendance, July 20.....	353
Highest monthly attendance, July	2,140
Highest monthly average, July	82 +
Lowest daily attendance, January 1, February 4 and 21, on each date	7

Holiday Attendance

Decoration Day	205
Independence Day	50
Labor Day	55
Columbus Day	60
Election Day	53
Thanksgiving Day	58
Christmas Day	9
New Year's Day	7
Lincoln's Birthday ²	—
Washington's Birthday	<u>21</u>
Total holiday attendance.....	518

¹ Lowest attendance since September 1911. In that year, however, the Museum was open 26 days during September, with an attendance of 468, while the attendance for the past February was 487, with the Museum open only 18 days.

² Museum closed on account of lack of heat.

The Museum was closed from February 7 to 13 inclusive because of lack of fuel. The closing for this period, added to the comparatively small attendance for the months of December and January, caused by the severe cold weather, brought down the attendance for the fiscal year to a point lower by nearly four thousand than that of the calendar year of 1917.

MUSEUM AND LIBRARY ACCESSIONS 1917-18

ARCHEOLOGY AND ANTHROPOLOGY	280
ARTS AND ANTIQUITIES	417
BOOKS, PRINTS, ETC.	231
BOTANY	83
GEOLOGY	61
ZOOLOGY	53
MISCELLANEOUS	13
Total	1,138

These were comprised in 117 accessions, of which 98 were gifts, 9 purchases, and 10 collected for the museum by members of the staff.

CHILDREN'S LECTURES

Date 1917	Subject	Speaker	Attendance
Nov. 2 ¹	The Grand Canyon of the Arizona and the Giant Trees of California	Dr. Hollick	182
9 ¹	Historic Battlefields of the Cham- plain Valley	Mr. J. W. Wiseman	198
16	The Island of Hayti and Santo Domingo	Mr. Norman Taylor	120
23 ¹	Winter Bird Protection	Mr. Harold K. Decker ² ...	175
30	Notes on Nature Study.....	Mr. Walt F. MacMahon...	59
1918			
Dec. 7	A Short Talk about Faerie People	Mr. J. L. G. MacMahon...	95
14	The Yosemite Valley	Dr. Hollick	29
21	A Trip to Hawaii	Miss M. D. Lee.....	30
28	A Christmas Song Rally.....	Miss E. M. Pollard	59
	assisted by Mrs. R. S. Armstrong, Mrs. Henry A. Craig, Miss Ethel Curtis, Miss Lucy Curtis, Mrs. C. A. Ingalls, singers; George Craig, Sherman Ingalls, Theodore Koenig, violinists.		957

Total number of lectures, 9. Average attendance, 106 +.

¹ Lectures repeated.

² Mr. Alanson Skinner, scheduled on this date for Adventures among the Indians, was absent in Canada, and Mr. Decker substituted at the last moment.

LIST OF DONORS TO THE MUSEUM AND LIBRARY FOR 1917-18

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F. J. Heal	Edward Wangestein and others
J. Blake Hillyer	Mrs. H. Prescott Wells
William R. Hillyer	Charles Young

LIST OF INSTITUTIONS FROM WHICH PUBLICATIONS WERE RECEIVED DURING 1917-18

American Academy of Arts and Sciences
 American Museum of Natural History
 Boston Museum of Fine Arts
 Brooklyn Botanic Garden
 Brooklyn Museum
 Brooklyn Public Library
 California Academy of Sciences

Canada Geological Survey
Canadian Entomologist
Charleston Museum
Children's Museum of Boston
Children's Museum, Brooklyn Institute
Cleveland Public Library
Colorado College
Colorado Scientific Society
Connecticut Academy of Arts and Sciences
Connecticut State Geological and Historical Survey
Elisha Mitchell Scientific Society
Entomological Society of Ontario
Glasgow Naturalist
Institute of Biological Studies of Mexico
Instituto Geologico de Mexico
Iowa Academy of Science
Iowa State University
John Crerar Library
Lloyd Library
McGill University
Michigan Academy of Science
Missouri Botanical Garden
Municipal Reference Library
New York Academy of Sciences
New York Botanical Garden
New York State Library
Oberlin College Library
Ohio Archeological and Historical Society
Ohio Geological Survey
Ohio State University
Ottawa Field Naturalists Club
Pennsylvania Museum and School of Industrial Art
Philadelphia Academy of Natural Sciences
Provincial Museum, Victoria, B. C.
Rochester Academy of Science
Roger Williams Park Museum
Saint Louis Academy of Sciences
San Antonio Scientific Society
Sapporo Natural History Society
Torrey Botanical Club
Tufts College
U. S. Bureau of Fisheries
U. S. Department of Agriculture
U. S. Department of the Interior
U. S. Geological Survey

U. S. National Museum
 University of California
 University of Iowa
 University of Montana
 University of Nebraska
 University, State of New York, New York State Library
 University of North Dakota
 Warren Academy of Sciences
 Washington University

REPORT OF THE BRITTON COTTAGE COMMITTEE

Your committee beg to report upon matters connected with the Britton Cottage as follows:

SOCIAL FUNCTIONS

On Saturday, May 26, 1917, the museum staff enjoyed the privilege of entertaining a delegation of visiting members of the American Association of Museums, which held its annual meeting in New York during that week.

An informal lunch and reception was given at the Museum, after which the visitors were taken by automobiles to the Cottage. In addition to those present from the museums of Greater New York and vicinity the following institutions were also represented by delegates: the Art Museum and Museum of Natural History of Springfield, Mass., the Museum of the Buffalo Society of Natural Sciences, the Public Museum of Milwaukee, Wis., and the Charleston [S. C.] Museum.

Dr. Arthur Hollick gave a brief account of the history of the Cottage and how it became the property of the Association through the generosity of Dr. N. L. Britton; also an outline of the local historical work in which the Association is engaged as one of its important museum activities.

On Saturday afternoon, October 6, Staten Island Chapter, Daughters of the American Revolution, gave a colonial tea and reception at the Cottage, at which about eighty members and guests of the Chapter were present. Dr. John Q. Adams delivered the formal address of the day.

The occasion also served to celebrate the completion of the work of renovating and furnishing the diningroom, which has been restored as nearly as possible to what is assumed to have been its original condition. The most important item of work was the removal of the relatively modern lath and plaster ceiling and the exposure of the old, massive oak beams.

CARE AND MAINTENANCE

Mr. and Mrs. Daniel Henry were continued as custodians, having remained in the Cottage throughout the winter.

During October the privet hedge was trimmed, for the first time and a two-strand, barbed wire fence was strung through the middle throughout

its entire extent, and the large gate on New Dorp Lane was completely reconstructed.

During one of the severe storms in January the skylight in the main roof was blown off and had to be repaired and replaced. Several minor repairs in the house were also attended to.

During May the grounds were inspected and everything was found to have survived the phenomenally cold winter quite satisfactorily. The hedge was apparently in good condition, although many of the privet hedges throughout the island suffered severely. The two Bartram oak trees showed no indication of having been affected by the cold and were apparently preparing for a vigorous season's growth.

NOTES AND COMMENTS

A verbal communication was recently received from Mersereau Chapter, D. A. R., to the effect that it is about to begin its allotted part in the renovation and furnishing of the Cottage by assuming charge of one of the bedrooms. Preliminary plans have already been submitted for the consideration and approval of the committee.

Among matters that will require attention in the near future are (1) repairs to the fencing along the right of way between New Dorp Lane and Neptune Street, (2) the fencing of the narrow strip along Neptune Street, (3) the removal of certain trees which are in a dying condition, (4) the planting of new trees. In this latter connection the committee would be glad to have the cooperation and advice of the Section of Natural Science.

In conclusion the committee take advantage of this opportunity to acknowledge another contribution of \$100 from Dr. N. L. Britton for the care and maintenance of the premises.

JOHN Q. ADAMS,
N. L. BRITTON,
ARTHUR HOLLICK,
Committee.

REPORT OF THE COMMITTEE OF ARRANGEMENTS FOR THE CEREMONIES ATTENDING THE LAYING OF THE CORNERSTONE OF THE NEW PUBLIC MUSEUM BUILDING

Prepared by CHARLES W. LENG, Secretary

The cornerstone was laid at 3:30 p.m. October 20, 1917, by Hon. Howard R. Bayne, president of the Association, assisted by Robert Humphreys, the mason in charge of construction, and Mark T. Milnes, the representative of the contractor, John Milnes Company, in the presence of a large gathering, among whom were the following members of the Board of Trustees: Dr. John Q. Adams, Dr. N. L. Britton, Mr. William T. Davis, Mr. Anton

W. Hoffmeyer, Mr. William H. Mitchill, Mr. S. McKee Smith, Mr. Jas. R. Walsh, Mr. F. Winthrop White, Hon. William G. Willcox, Hon. George Cromwell; the following representatives of the scientific staff of the Museum: Dr. Arthur Hollick, director, Miss Agnes Pollard and Mr. Howard H. Cleaves, curators; the comptroller of the City of New York, Hon. Wm. A. Prendergast; and the following members and friends of the Association: Mr. Robert W. Gardner, the architect of the new building, and Mrs. Gardner, Mrs. John Q. Adams, Mrs. Anton W. Hoffmeyer, Mrs. Jas. R. Walsh, Mrs. F. Winthrop White, Mrs. Howard R. Bayne, Mrs. Herbert C. Bugbird, Mr. Lloyd M. Bayne, Mr. W. W. Bryan, Mr. Jas. W. Clawson, Mrs. Elizabeth Davis, Miss Bessie E. Davis, Mrs. Melvin L. Decker, Mr. Daniel J. Haverty, Mr. J. Blake Hillyer, Mrs. Hollick, Mrs. T. L. Kennedy, Mrs. A. M. King, Miss Lucy J. Kipper, Mrs. Ethel L. Kraft, Mr. Charles W. Leng, Mrs. John May, Mrs. Robert H. Pentz, Mr. A. L. Schwab, Mr. and Mrs. Alanson Skinner, Mr. Carl Eugene Tefft, Mr. George W. Tuttle, Mr. David Varon, Mr. Lot C. Alston, Rev. J. H. Brinckerhoff, Dr. J. C. Conner, Mr. F. A. Errington, Mr. Louis A. Pape, Mrs. H. Prescott Wells, and others.

Letters of regret from Mayor Mitchell, Dr. C. Stuart Gager, Director of the Brooklyn Botanic Garden, and Miss Anna B. Gallup, Curator of Children's Museum of the Brooklyn Institute, were received. Hon. Calvin D. VanName, President of the Borough of Richmond, was present previous to the opening of the ceremonies, but was unable to remain because his presence was required in connection with the parade of the Naval Militia.

The ceremonies were opened by the president, who spoke as follows:

REMARKS OF HOWARD R. BAYNE AT THE LAYING OF THE CORNER STONE
OF THE STATEN ISLAND INSTITUTE BUILDING OF NEW
BRIGHTON, STATEN ISLAND, N. Y.

Ladies and Gentlemen: It becomes my pleasant duty as president of the Staten Island Association of Arts and Sciences, to call this gathering to order and to preface the proceedings by a few remarks.

It is our privilege to see this day, which many in the past desired to see but saw it not.

Many years ago, on November 12, 1881, a small gathering of the citizens of Staten Island met at the home of Mr. William T. Davis and organized the Natural Science Association of Staten Island. Subsequently on the 19th day of January, 1885, this body was incorporated under the general New York statute. Fourteen years after the organization of the Association, I had the honor to be elected a member of it, and from that time I have followed its history and development with close attention and interest. I was elected president of the Association on November 8, 1902, and from that time to this, throughout the changes of name and incorporation, I

have had the honor to continue in this office and the great satisfaction to witness its development.

The first repository of the collection of the Association was a bookcase in the meeting room of the Board of Trustees of the Village of New Brighton, in the building still known as the Village Hall on the southwest corner of Lafayette Avenue and Second Street. I was not then a member of the Association, and on inquiring of one of the village statesmen whom I met in the building at that time, I was informed that the collection belonged to the "Bug" Davis Society. Not knowing who "Bug" Davis was, on further inquiry I was informed that he was a man who collected "worms, bugs and such truck" and put them on the shelves in that bookcase, and that he had with him a number of other cranks, whom the said statesman could not name. This was, I think, the first time that I heard of our vice president and charter member, Mr. Wm. T. Davis, who is still active in all good things for the welfare of our organization.

The membership of the society at its organization was 14. At the time when I became a member it had increased to 77. Its present membership is 309. The collection increased so much in a few years that it became necessary to remove it to another repository where the surroundings were more congenial, to one of the top rooms of the Staten Island Academy. The collection in time so filled the room that we began to question what should be done with the rapidly accumulating material. It became evident that this collection, which by this time contained both books and specimens of great value to the community, should have a home where it might be available, not only to the members of the society but to the public generally. And so the idea developed to make the Association a public institution, to be maintained by the public under the control of the Association as were other similar institutions in Manhattan and Brooklyn. I was accordingly authorized by the Board of Trustees to take the matter up with Hon. George B. McClellan, mayor at that time of the city, and invoke his interest and approval. I had a courteous reception from Mr. McClellan to whom I stated our purpose and the necessity of a legislative charter, but we realized however, that this could not be accomplished without his approval, and we therefore urged his cooperation. While expressing general approval of our purpose, he referred me to his legal adviser, the Corporation Counsel, who was at that time Hon. Delaney. It so happened that Mr. Delaney was a gentleman of education and culture and much interested in the growth and development of educative institutions. He also expressed interest in the project and requested me to submit a bill which we thought sufficient to be submitted to the Legislature. This was done and the bill received his approval. The mayor upon the recommendation of the corporation counsel, also approved the bill, and it was then entrusted to our representatives in the Senate and the Lower House at Albany. It went through both bodies and was signed by the Governor with unusual expedition and became a law on May 17,

1905. Amendments to the law of 1905 were passed in 1910 and 1911, which enlarged the scope and opportunities of the Association.

By the cooperation of the president of the borough, Hon. Geo. Cromwell, we then secured from the city not only quarters in the Borough Hall at that time deemed commodious for our library collection, but also an annual allowance of \$4,000. The growth of the institution, and the need of the borough for the space we occupied in the Borough Hall were such that it became necessary for the city, in 1911, to appropriate a separate building for our purposes. And that, as you all know, we are still occupying.

But the passage of time has rendered those accommodations utterly inadequate, and hence greater and better facilities had to be provided for the activities of the organization. The Board of Trustees authorized appeals to be made for subscriptions to a building fund to erect a structure suitable for the institution for some time to come. The city has granted us this land upon which we stand today. Citizens of Staten Island, headed by one of our trustees, Mr. William G. Willcox, who has made us the munificent gift of \$10,000, nearly one half the estimated cost of the building which we are now about to erect, have provided the means of securing for us something like an adequate structure within which to carry on the work of the Association. And so we are here today to lay this foundation for a building which I hope will prove a blessing to the community in which we live.

The president introduced Hon. Wm. A. Prendergast, comptroller of the City of New York, whose remarks were impromptu, indicative of the strong feeling of appreciation he entertained for the gratuitous labor of the president and trustees of the Association and of the important gifts of the donors to the building fund. He said in substance that while museums might be included by some as "fads and fancies" they were in his estimation evidences of the highest civilization, and it was therefore gratifying to be able to congratulate the citizens of Staten Island on the support they had given to the Association, which he hoped would continue to prosper.

The president introduced Hon. George Cromwell, State Senator, who also spoke impromptu, so that only the substance of his remarks can be reproduced. They were to the effect that he took great pleasure and some pride in assisting at a ceremony in which he felt that his personal efforts to secure for the St. George approach to Staten Island from the bay, a group of imposing buildings had been in some degree contributory. The Borough Hall, the new Courthouse, the Library, the Staten Island Academy and the Curtis High School were monuments to the civic and educational features of Staten Island life. These were now to be supplemented in a worthy manner by the new Public Museum of Arts and Sciences. The genius of Senator Bayne and the generosity of the donors to the building fund should ever be remembered in connection with this latest exposition of Staten Island intellectual progress.

The president introduced Hon. William G. Willcox, President of the Board of Education and the donor of the largest amount toward the building fund. Mr. Willcox said in substance that while the great war naturally occupied a large part of everyone's mind at this time, it seemed to him desirable that continued efforts toward educational advancement should not be abandoned. To this end he felt that the Public Museum, arising from an association maintained for more than a quarter of a century by private enterprise, was deserving of every encouragement; he was glad to have been able to assist and congratulate the president, the trustees and the scientific staff of the Association on the approaching fruition of their labors.

The president introduced Dr. Nathaniel L. Britton, Director of the New York Botanical Garden and one of the three men who signed the call for the first meeting of the Natural Science Association in 1881. Dr. Britton spoke as follows:

The little group of students that founded the Natural Science Association of Staten Island in November, 1881, had at the time little more in view than to provide opportunity, through meetings, of an interchange of facts and opinions concerning rocks, minerals, plants, animals, and relics of the island, but the formation of collections of these objects and of books and pamphlets for the Association, as distinguished from the personal collections and libraries of the members, were soon afterward taken up as a definite purpose. This accumulation of specimens and of literature has since proceeded continuously, objects of art and objects illustrating history were first added to the collections at a later period. In recent years, the increase of all these kinds of collections has gone forward simultaneously, the scope of the society becoming constantly broadened; its change of name in the spring of 1905, to the Staten Island Association of Arts and Sciences, was a natural and appropriate recognition of this expanded usefulness, going so far indeed as to place in the title, 'at least Arts' before Sciences; perhaps this was only for the sake of euphony.

The museum and library thus accumulated during thirty-six years, through the efforts of many members and friends, and hitherto conserved under great disadvantages, are now to be made secure in the new building, the commencement of construction of which we celebrate today. The collections which will find their permanent home here are highly important to this community, to the city, and to knowledge in general; many of the specimens are unique and could not possibly be duplicated; by no means all of them are large and conspicuous objects; in fact, most of them are not striking in appearance, but they are of enormous importance historically and from the standpoint of local nature study; they include almost complete illustrations of the geology, mineralogy, botany, zoology, and archeology of the Borough of Richmond; the historic and artistic objects are in many instances rare and noteworthy. We cannot

doubt that this building will stimulate the development of the collections, by providing a secure repository for valuable objects, which would otherwise not be given. The accession of at least one such important series of natural objects has already been forecasted.

The hope of making the collections of the Association at the same time secure and available for public instruction, was evidenced some years after their accumulation was commenced, by an attempt to obtain a building, for which some subscriptions were made at the time, but we had no leaders of sufficient force to carry the movement through. More recently the collections have been so housed as to be efficient in public instruction, but they have not been safe, and their increasing importance rendered the need of a fireproof building acute. The enlightened liberality of Mr. Willcox through his generous contribution, which made the present attempt successful, is a monument on the line of increasing usefulness of this organization, which will always be pointed out as one of his most effective beneficences. That we may trust to others in the future, on the principle that example is better than precept, to emulate him and further develop this building on this excellent location, I believe there can be no doubt.

This institution, thus satisfactorily housed, is worthy of liberal private and public support; a station has been established for the diffusion and for the conservation of knowledge and of information.

The president introduced Dr. Arthur Hollick, the director of the museum and the second of the three men who signed the original call in 1881. Doctor Hollick spoke as follows:

Our president has introduced me as the director of the museum; but on this occasion I prefer, personally, to think of myself merely as one of the three young men (myself, Doctor Britton, and Mr. Davis) who issued the call for the meeting, thirty-six years ago, at which was organized the Natural Science Association of Staten Island. It was the organization of this association on the 12th of November, 1881, that made possible the laying of this cornerstone. So to me the greatest significance that attaches to these exercises today is that they commemorate, only a few days in advance, the thirty-sixth anniversary of the organization of the old association. And it occurs to me as somewhat remarkable that the three founders should be, not only alive and well, but present on this occasion and still active in the affairs of its successor, the present Staten Island Association of Arts and Sciences. Thirty-six years have been a long time to wait and to work, generally under discouraging conditions; but I feel today that we can forget all this and say that the result achieved at last has made our work and our sacrifices seem well worth while.

The president said that it had been his intention to call upon Mr. Wm. T. Davis, the third of the men who signed the original call in 1881, but that he had decided to refrain from doing so in deference to the wishes of Mr.

Davis. At this point Mr. Howard H. Cleaves photographed Dr. Britton, Dr. Hollick, and Mr. Davis standing before the cornerstone that was to be laid.



WM. T. DAVIS

ARTHUR HOLLICK

N. L. BRITTON

The president then spoke of the valuable work of Dr. John Quincy Adams, assistant secretary of the Art Commission of the City of New York in soliciting and obtaining the funds for the erection of the building, and called up Doctor Adams to speak. Doctor Adams spoke as follows:

The finance committee which solicited subscriptions for the building fund found among all those visited a generous interest and sympathy with the enterprise. Even those who did not feel that they could contribute manifested a lively interest in our new building. This cordial reception which we everywhere met gave us great encouragement and was a factor in our success. It was only by continuous effort that the necessary amount of subscriptions was secured within the time limit. We appreciated of course that Mr. Willcox made his generous offer not for the purpose of arousing competition but with the thought that the people of the island should be given an opportunity to contribute to the new museum building. His offer was made with the condition that an equal amount be subscribed by others before May first, which gave us over seven months.

It was a long struggle and as you know, the work fell mostly on the committee. In the latter part of April it looked as though we might not succeed in securing the required amount but we never lost our courage. We believed Mr. Willcox would extend the time if asked to do so but we were too proud to ask him.

We had many interesting experiences but perhaps the most interesting came on the last day when two of us made a trip to Brooklyn to the factory of a gentleman at whose office we had called several times and failed to find him in. After we told him our object we said that we still lacked \$310 to complete the amount. He said "I will make it up" and turned to his desk and wrote out the check.

84 · STATEN ISLAND ASSOCIATION OF ARTS AND SCIENCES

It is unnecessary for me to say that this ceremony today is very gratifying to the finance committee as well as to our entire Association and we hope that in no distant future we shall see the building completed as originally planned.

The president then called upon Doctor Hollick to state the contents of the copper box placed within the cornerstone and donated by Mr. John Milnes. The contents of the box are as follows:

LIST OF ARTICLES PREPARED FOR THE CORNERSTONE BY ARTHUR HOLLICK

- Copy of Proc. Nat. Sci. Assoc. Staten Is., first issue, Nov. 10, 1883.
- Copy of Proc. Nat. Sci. Assoc. Staten Is., last issue, June 3, 1905.
- Copy of Proc. Staten Is. Assoc. Arts and Sci., first issue, June-Dec. 1915.
- Copy of Proc. Staten Is. Assoc. Arts and Sci., last issue, Oct. 1915-Jan. 1916.
- Copy of Museum Bull. Staten Is. Assoc. Arts and Sci., first issue, Aug. 1908.
- Copy of Museum Bull. Staten Is. Assoc. Arts and Sci., last issue, Oct. 1917.
- Copy of Memorial Number, Commemorating the Celebration of the 25th Anniversary of the Organization of the Natural Science Association of Staten Island. Issued March 15, 1907, by the Staten Island Association of Arts and Sciences.
- Copy of invitation issued in connection with the laying of the cornerstone of the museum building, Oct. 20, 1917.
- Copies of the New York World, Sun, Times, Tribune, and the Staten Islander of Oct. 20, 1917.

The president then exhibited the trowel of brass, silver plated, donated for the occasion by Mr. Louis A. Pape, through Mr. Anton W. Hoffmeyer, and read the inscription which was as follows:

Used at the laying of the
Corner Stone
of the
Museum Building
Staten Island Association
of
Arts and Sciences
October 20, 1917
Presented
by
Louis A. Pape

The mortar was then mixed by the mason and spread by the president, using the silver trowel, and the cornerstone with the copper box therein

contained, donated by Mr. John Milnes, was lowered into place. At the conclusion of the ceremony Mr. Willcox introduced two Boy Scouts, stating that they would receive subscriptions to the Liberty Loan, as an appropriate close to the ceremonies, in view of the conditions surrounding the entire nation.

At the regular October meeting of the Association later in the evening the president expressed his grateful appreciation of the efficient assistance of the members of the committee of arrangements, who were Mr. Wm. T. Davis, Mr. Anton W. Hoffmeyer, Dr. John Quincy Adams.

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Spaus, John
Sperrle, O. E.
Stenzel, J.
Stirn, Louis A.
Stone, M. E.
Stone, S. J.
Strauss, G.
Stumpp, August
Timolat, J. G.
Tollett, F. M.
Trench, A. R.
Trench, C. J.
Trench, C. S.
Tuttle, George W.
Van Name, Hon. Calvin D.
Varon, David
Verdon, F. A.
Walsh, James R.
Walsh, Mrs. J. R.
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Weatherdon, Frank J. E.
Wemple, William Y.
White, F. Winthrop
White, Mrs. F. W.
Willcox, Mary Otis
Willcox, William G.
Witte, Mrs. H. A.

INDEX

- Accessions, 68, 73
 Adams, John Q., 61, 65, 76, 77, 83,
 85
 Mrs. John Q., 78
 Advance, Richmond County, 31
 Agalinis purpurea, 58
 Aigrettes, 1
 Allatt, Frank, 32
 Alston, Lot C., 78
 American Association of Museums,
 71
 American Hospital, 69
 Anable, Courtland V., 85
 Annex, 71
 Anoda triangularis, 58
 Annual reports, 61, 63, 64, 65, 72, 76
 Aqueduct, 5, 69
 Archbold, Mrs. John F., 66
 Archeology and Anthropology, 73
 Arlington, 58
 Armstrong, Mrs. R. S., 73
 Arosmith, Joseph, 27
 Arts and Antiquities, 73
 Aru Islands, 4
 Atriplex laciniata, 58
 Attendance, 62, 67, 72
 Austin, Alfred, 31
 Avery, Samuel P., 66

 Bailhache, Preston H., 74
 Bailey, William L., 66
 Baker, Dr. Thomas O., 61
 Baldwin, Ernest L., 61
 Barber, Harry G., 15
 Barnaby, Charles W., 85
 Barnes, Samuel, 27
 Barrett, Nephews & Co., 85
 Bartram oak, 32, 58, 77
 Battlefields, 73

 Bayne, Hon. Howard R., 5, 9, 45,
 46, 47, 49, 50, 51, 61, 74, 77,
 78, 85
 Mrs. Howard R., 78
 Lloyd M., 78
 Beach sands, 21
 Benedict, Mrs. Charles P., 66
 Benziger, Bruno, 85
 Mrs. Louis, 85
 Berkey, Charles P., 11
 Bernstein, Isador, 74
 Bidens laevis, 7
 Bidessus suburbanus, 47
 Big Game Hunting, 51
 Bill, Benjamin, 22
 Bird of Paradise Plumage, 1
 Birds, 73
 Boger, Frederick, 85
 Books, prints, etc., 73
 Borough Hall, 79
 Botany, 73
 Botsford, W. H., 85
 Boulders, 21
 Bourepos, David de, 27
 Bowden, Mrs. Frank, 74
 Boy Scouts, 84
 Boyd, William, 85
 Brasenia purpurea, 7
 Brick, Samuel R., 66, 85
 Bridgman, Edward C., 66, 85
 Brimley, C. S., 17
 Brinckerhoff, Rev J. H., 78
 Brittin, Benjamin, 23
 Nathaniel, 23
 Britton, Dr. N. L., 32, 34, 61, 62, 66,
 74, 76, 77, 81, 82, 83, 85,
 Nicholas, 27
 Nathaniel, 27
 R. N., 74

- Britton Cottage, 52, 63, 71
 Brooklyn Botanic Garden, 68
 Brooks, Bertha G., 85
 Brown, C. H., 70
 Dr. Lucius P., 61
 Edward W., 66, 85
 Bruns, C. A., 85
 Bryan, Thomas, 74
 W. W., 62, 78, 85
 Bugbird, Mrs. H. C., 78
 Bull's Head pumping station, 9
 Burns, Edward J., 59, 66
 Burnt Island, 53
 Burr, William H., 11
 Butler, Elmer, 66, 85

 Campbell, Daniel, 66
 Carabus nemoralis, 59
 Carlo, Angelo, 31
 Carrère, John M., 10
 Cary, Daniel, 66
 Casier, Philippe, 29
 Catskill aqueduct, 5, 40
 Water supply, 39
 Change of name, 46, 47
 Cherry, 7
 Children's lectures, 67, 73
 Christmas Song Rally, 73
 City appropriation, 65
 Clark, Lester W., 85
 S. Gertrude, 74
 Clarke, John D., 74
 Clawson, James W., 62, 66, 78
 Clays, 21
 Cleaves, Helen E., 74
 Howard H., 7, 8, 30, 32, 47, 49,
 57, 60, 61, 62, 66, 69, 74, 78, 82
 Clematis, 69
 Clifton, 45
 Clove pumping station, 9
 Clove reservoir, 9
 Clove Valley, 21, 32, 59
 Cole, Abm., 27
 Congdon, Ernest A., 10
 Conner, Dr. J. C., 78
 Cooper, James, Fenimore, 57

 Cornerstone, Ceremonies, 77
 List of articles, 84
 Corning, Elizabeth, 74
 Corsen, Daniel, 28
 Jacob, 23
 Cortelyou, Jacques, 29
 Coursen family, 43
 Court Records, 22
 Crabtree, Anna H., 85
 Craig, George, 73
 Mrs. Henry A., 73
 Samuel, 66
 Cromwell, Hon. George, 62, 78, 80
 Cretaceous, 21
 Crosby, Maunsell S., 66
 Crown Grants, 41, 57
 Curtis, Mrs. George Wm., 85
 Miss Ethel, 73
 Lucy, 73

 D. A. R., 63, 76, 77
 Daley, Miss Mary Wood, 61, 74
 Danzilio, F. P., 56
 Davis, Miss Bessie E., 54, 66, 74, 78
 Mrs. Elizabeth, 66, 68, 74, 78
 Thomas E., 48
 Wm. T., 5, 8, 10, 13, 15, 19, 32,
 33, 38, 46, 48, 49, 51, 52, 57, 58,
 60, 61, 62, 66, 74, 77, 78, 79,
 82, 83, 84, 85
 Davidson, W. J., 85
 Decker, Harold K., 58, 73, 74, 85
 Melvin L., 78
 Decodon verticillatus, 7
 DeHart's brook, 49
 Delavan, Edward C., Jr., 8, 22, 56,
 57
 De Meli, G. D., 85
 Dentaria laciniata, 7
 Depuy, John, 27
 Diadophis punctatus, 59
 Diospyros virginiana, 7
 Disosway, Charles N., 74
 Dix, S. M., 85
 Donald, John, 85
 Dover, 29, 56

- Dowell, Dr. Philip, 62, 74
 Dreyfus, Dr. Louis A., 66, 85
 Mrs. Louis A., 66
 Droilhet, Paul, 27
 Dubois, Mrs. Anna G., 85
 Ducasse, F., 71
 Duffie, D. P., 85
 Duffies, J. B., 50
 Durkee, Charles D., 45, 56, 74, 85
 Dutch Church, 26
 Dytiscidæ, 47
- Early History of Staten Island, 44
 Eckstein, Monroe, 85
 Edwards, Stafford C., 74
 Egypt, 47
 Election of Trustees, 51
 Members, 61
 Eleocharis acicularis, 7
 English Crown Grants, 41
 Epstein, William, 74
 Errington, F. A., 78, 85
 Mrs. F. A., 85
 Erythronium americanum, 21
 Exchanges, 74, 75, 76
- Faber, Eberhard, 85
 Lothar W., 85
 Faerie People, 73
 Fall, H. C., 47
 Fannon, Charles E., 61
 Feldman, Mr. and Mrs. D. D., 85
 Fern, 6
 Ffarmer, Thomas, 27
 Field mouse, 59
 Field work, 68
 Finch, Mrs. Mary H., 66, 85
 Fisher, Miss Ruth B., 66
 Food Administration, 70
 Foote, Jennie, 74
 Forsyth, Alexander, 66
 Francis, 66
 Fort Hill, 35
 Fort Hill reservoir, 9
 Fossils, 21
 Fox, 50
- Francis, Mary S., 74
 Fredericks, Hy., 74
 J. F., 85
 Freeman, John R., 10
 L. W., 56, 74, 85
 Fuller, Henry J., 66
- Gager, Dr. C. Stuart, 78
 Gallup, Miss Anna B., 78
 Gans, Mrs. John H., 85
 Gardner, Robert W., 62, 78, 85
 Mrs. R. W., 78
 Garisone Lambt., 27
 Garrett, Mary, 74
 Garrigan, Peter, 74
 Geoffrey, Oliver P., 66, 85
 Geology, 73
 Gerardia, 58
 Gershoy, Alexander, 32, 69
 Gitton, Lewis, 27
 Glavin, Eugene, 31
 Glacial Till, 7
 Gostenhofer, C. H., 85
 Graham, Aug., 27
 Grahams, Col., 26
 Grand Canyon, 73
 Grant City, 9
 Gratacap, Louis P., 10, 19, 48, 62, 85
 List of papers, 21
 Great Kill, 29, 46, 68
 Greater bird of paradise, 1, 46
 Grieshaber, C. F., 85
 Grout, Abel J., 66
 Grymes Hill, 9
 Grymes, J. Randolph, 85
 Gull, 58
 Guyon, Jacques, 29
 James, 27
- Hafstrom, G. F., 74
 Hagadorn, Francis, 74
 Francis C., 55
 Francis L., 55
 Hage, Daniel S., 66, 85
 John D., 66, 85
 Hall, John, 74

- Hanks, Annie D., 69
 Hansen, Alaric, 74
 Hardin, Col. and Mrs. E. E., 85
 Hardon, Mrs. Henry W., 66
 Haverty, Daniel J., 78
 Hawaii, 73
 Hayti, 73
 Hayward, W. R., 85
 Heal, F. J., 74
 Heath, Ernest H., 85
 Heine, Paul, 66
 Hendee, Alice J., 50
 Henderson Avenue, 59
 Henry, Daniel, 76
 Hessian Springs, 8
 Heyn, Mrs. Emma, 85
 Hickory Nuts, 7
 Hildebrandt, F., 85
 Hillyer, J. Blake, 74, 78
 William R., 74
 Hine, Charles G., 50, 52, 85
 Historical Research, Section, 52
 Hoffmeyer, Anton W., 61, 66, 78, 84,
 85
 Mrs. A. W., 66, 78, 85
 Leonel, 85
 Hoge, Milton, 74
 Hollick, Dr. Arthur, 1, 5, 6, 10, 11,
 31, 32, 35, 38, 39, 40, 41, 42,
 45, 48, 49, 52, 54, 56, 57, 58,
 62, 66, 71, 73, 74, 76, 77, 78,
 82, 84, 85
 Mrs. Arthur, 61, 78
 Hornaday, Dr. Wm. T., 2, 3
 Horrmann, William, 85
 Horseshoe Spring, 13
 Howland, R. H., 74
 Hoyer, N., 7
 Huguenot Park, 43, 60
 Humphreys, Robert, 77
 Hydroporus shermani, 47
 Indian relics, 49
 Ingalls, Charles A., 51, 61, 63
 Mrs. C. A., 73
 Ingalls, Sherman, 73
 Institutions, 74
 Iva frutescens, 52
 Jackson, Daniel D., 11
 Jeffrey, Prof. Edward C., 6
 Johnson, Joseph, 85
 Johnson's point, 53
 Johnston, H. C., 85
 W. A., 85
 Jones, Miller, 85
 Juhl, Albert & Elmer, 30
 Juniperus communis, 38
 virginiana, 38
 Kaufman, Emil, 85
 Kaye, Frank C., 50, 61
 Kennedy, Adrian, 74
 Mrs. Marie Alice, 85
 Mrs. T. Livingston, 78
 King, Mrs. Anna M., 66, 78, 86
 Kipper, Miss Lucy J., 78, 86
 Knauth, Mrs. Wilhelm, 66
 Koenig, Theodore, 73
 Kolff, Cornelius G., 44, 86
 Kraft, Mrs. Ethel, 66, 78, 86
 Kreischerville, 68
 Kunz, Dr. George F., 5
 Lackerman, Abm., 23
 Ladon exusta, 59
 Larus argentatus, 58
 Latourette, John, 27
 Lease, 62
 Leaves, 21
 Lee, Miss M. D., 73
 Leng, Charles W., 5, 47, 52, 57, 61,
 62, 64, 77, 78, 86
 Lewis, Harrison F., 74
 Liberty Loan, 70, 84
 Lillie, Mrs. George M., 74
 Limonite, 21
 Lins, T. R. J., 62

- Literature relating to Staten Island,
35
Loeffler, Otto, 8
Logan Spring, 8, 13, 59
Loines, Russell H., 66
Lonicera japonica, 52
Lookerman, Covert, 43
Lorinseria areolata, 6, 43
Lovell, Francis, 29
Low, Daniel, 36
Lowe, N. J., 86
Lymnea palustris, 21
- McAneny, George, 6
McCarthy, Daniel, 31
McClellan, Hon. George B., 79
McKay, John W., 9, 74
McKee, Hon. Ralph R., 74
McLean, North, 86
Macdonald Collection, 71
MacMahon, J. L. G., 73
Walter F., 73
Malay Archipelago, 4
Mantis, 59
Marila vallisneria, 31
Mariner Harbor, 49, 59
Marne, Battle of, 48
Martin, John, 86
May, Mr. and Mrs. John, 78, 86
Mayer, Walter, 47, 74
Meetings, 45, 52, 61, 64, 72, 76
Melochia corchorifolia, 58
Menzel, John E., 74
Mershon, S. L., 41, 42, 53, 57, 74
Meyer, Richard, 86
Michell, Arthur A., 47, 61, 74, 86
Miller, Eleanor, 74
Milnes, John, 86
Mark T., 69, 77
John, Co., 62, 77, 84
Mirror, Richmond Co., 48, 55
Mitchell, Mayor, 78
Mitchill, William H., 61, 66, 74, 78
Money, Henry de, 27
Monohan, Joseph, 31
Moravian Brook, 47
Morin, Fernando, 30
Morrill, Philip, 23
Morris, Ira K., 44, 56
Mott, Adam, 23
Mount Loretto, 30
Mouse, 59, 60
Murphy, Capt. Francis D., 51, 62, 66
Music, 73
- Narrows, 45, 54, 55
Siphon, 11
Natural Science, Section, 57
Nature study, 73
Necrology:
Bryan, W. W., 62
Clawson, J. W., 62
Gratacap, L. P., 19, 48, 62
Lins, T. R. J., 62
Murphy, F. D., 51, 62
Rosenberg, C., 62
Tabb, H. A., 62
New Brighton, 48, 56
New building, 62
Newbury, Andrew J., 57, 66
New Dorp, 47
New Guinea, 4
New Springville, 9
New York Mineralogical Club, 68
Zoological Society, 3
North Side, 26
- Oakley, Miss Helen M., 66
Old Roads, 54
Old Town, 29
Olmsted, Frederick L., 10
Olsen, Mrs. E., 86
- Pape, Louis A., 61, 74, 78, 84
Paradisica apoda, 1, 46
Partenodera sinensis, 59
Pavilion Hill, 8, 45
Peat, 7
Pentz, Dr. James B., 61
Dr. Robert H., 61
Mrs. R. H., 78
Peppergrass, 7

- Persimmon, 7
 Pinus rigida, 40
 strobis, 6
 Pleasant Plains, 31, 68
 Pluymart, Mrs. N. J., 74
 Polhemus, Everett, 31
 Pollard, Agnes Lyman, 62, 65, 66,
 67, 70, 72, 74, 78, 86
 Charles Louis, 74
 Miss Edith M., 73, 74
 Pollion, Jacques, 27
 Polypodium vulgare, 6
 Porter, Martin R., 61
 Mrs. Susan I., 66
 Prall, Aron, 27
 Prendergast, Hon. Wm. A., 78, 80
 Prentiss, Baldwin S., 66
 Price, Walter W., 86
 Prince's Bay, 30, 68
 Prohibited plumage, 1
 Prunus pennsylvanica, 7

 Quarantine, 8
 Quartz, 21
 Quercus heterophylla, 32, 58, 77
 phellos, 33
 rubra, 34
 Quinn, Joseph, 19

 Rader, John, 66, 74, 86
 Rattlesnake, 15, 46
 Records of Meetings, 45
 Red Cross, 70
 Reichelt, V. H., 85
 Revolutionary War, 50
 Rezeau, Rene, 27
 Rianhard, Dane E., 86
 Richmond, Stacy, 85
 Richmond Valley, 30, 68
 Richoe, Harris, 23
 Riparian Grants, 42
 Robbin's Reef, 35
 Roberts, C. H., 47
 Vincent, 23
 Rohde, F., 85
 Rosenberg, Charles, 62

 Rossback, Herman, 74
 Rundlett, J. A., 8, 9
 Russell, David, 27
 Mrs. W. R., 86
 Ryan, M. M. L., 86
 Sailors' Snug Harbor, 13, 57
 Salamander, 59
 Sanderson Smith Library, 71
 Schmidt, Fedor, 86
 Schnackenberg Daniel, 86
 Schrieb, George, 61
 Schwab, Anton L., 66, 78
 Sciurus carolinensis leucotis, 59
 Seaman, Mrs. Billopp, 74
 William I., 66
 Sears, Mrs. Emily, 61, 86
 Seaweed, 21
 Section of Historical Research, 52
 Natural Science, 57
 Seeger, Alan, 35
 Seguin, James, 27
 Serpentine, 21
 Sesamum indicum, 58
 Sharrett, Horatio J., 54, 74
 Shaver, E. C., 52
 Shepard, C. Sidney, 66
 Shoemaker, Ernest, 86
 Silver Lake, 6, 21
 Reservoir, 8, 13, 39, 58
 Sistrurus miliarius, 16, 46
 Skinner, Alanson, 49, 66, 74, 78
 Mrs. A., 78
 Smilax rotundifolia, 21
 Smith, Mrs. Frank, 61
 Smith, S. McKee, 46, 47, 51, 52, 57,
 78
 Smoaking Point, 53
 Snake, 59
 Snyder, Lawrence, 74
 Southside Boulevard, 9
 Spaus, John, 86
 Spelerpes ruber, 59
 Sperrle, O. E., 86
 Springs, 8, 13, 21
 Squirrel, 59
 Staten Islander, 13, 62

- Staten Island Bird Club, 67
Academy, 79
Sound, 49
Stenzel, J., 86
Stilwell, Daniel, 28
John, 23
Stirn, Mrs. Edmund A., 66
Louis A., 86
Mrs. Louis A., 66
Stolzenhaler, Henry, 74
Stone, M. E., 86
S. J., 86
Stony Brook, 22
Storeria dekayi, 59
Stothers, Edward M., 52
Strauss, G., 86
Stuart, Alexander, 23, 27
Stumpp, August, 86
Sullivan, Dr. James, 46, 48, 61, 74
Symes, Lancaster, 42
- Tabb, Henry A., 62
Tansley, Frank D., 74
Taylor, Norman, 33, 73
Tefft, Carl Eugene, 78
Telegraph Station, 55.
Temperature, 30, 59
Tewksbury, Earl F., 74
Thamnophis sirtalis, 59
Thompson, Joseph C., 47
Timolat, J. G., 86
Todt Hill, 68
Tollett, F. M., 86
Tompkinsville, 49
Torrey Botanical Club, 68
Tottenville, 9, 30
Trap rock, 21
Treasury Department, 2
Trench, A. R., 86
C. J., 86
C. S., 86
Tribus, Louis L., 11
Trowel used for cornerstone, 84
Tuttle, George W., 52, 54, 56, 66,
74, 78, 86
Twigg, Alfred, 74
- Ullman, Percival Glenroy, 43
- Van Name, Hon. Calvin D., 65, 78,
86
D. M., 74
Varon, David, 50, 78, 86
Veatch, A. C., 11
Veghte, Gerret, 27
Verdon, F. A., 86
Veteran Corps of Artillery, 9
Village Hall, 79
Viorna ochroleuca, 69
- Walsh, James R., 61, 78, 86
Mrs. J. R., 78, 86
Wanek, A., 86
Wangenstein, Edward, 74
War posters, 50
Ward, Michael, 66
Water shield, 7
Water supply, 5
Weather, 30, 52, 59, 69
Weatherdon, Frank J. E., 66, 86
Wells, Mrs. H. Prescott, 74, 78
Wemple, William Y., 66, 86
Westfield, 49
West New Brighton, 9
Wharton, William P., 67
White, F. Winthrop, 67, 78, 86
Mrs. F. W., 78, 86
S. S. Dental Works, 31
Williams, William, 12
Willcox, William G., 61, 62, 67, 78,
80, 86
Mary Otis, 67, 85
Wiseman, J. W., 73
Witte, Mrs. H. A., 86
Wood, 7
Wood, Miss Annie F., 67
- Yosemite, 73
Young, Charles, 74
- Zapus hudsonius, 60
Zoology, 73

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